### STIC-Biotech/ChemLib

From: Sent: To:

Subject:

McGarry, Sean Tuesday, June 17, 2003 10:12 AM STIC-Biotech/ChemLib SEQ SEARCH 09/964,666

JUN 17 2003

(STIC)

Sean McGarry 73484 AU 1635 CM1 11D07 Office CM1 11E12 Mailbox 305-7028

09/964,666

Please, a length limited (nt ≤ 50) search of SEQ ID NOS 9-14.

Thank You

Edward Hart Technical Info. Specialist STIC/Biotech CMI 6B02 Tel: 305-9203

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| Searcher:                                      |
| Phone:   |
| Location: \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ |
| Date Picked Up: 111117                         |
| Date Completed: 1/2/23/603                     |
| Searcher Prep/Review:                          |
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| TYPE OF SEARCH: |  |
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| NA Sequences:   |  |
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| Structures:     |  |
| Bibliographic:  |  |
| Litigation:     |  |
| Full text:      |  |
| Patent Family:  |  |
| Other           |  |

| VENDOR/COST (where applic.)             |
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Post-processing: Minimum Match 0%
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Listing first 45 summaries
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Pred. No. is the number of results predicted by chance to have a
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score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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| nndes, E. and Bold<br>ss and correspond<br>47 23-NOV-2000;<br>(US)       | `                              | 21 bp                      | ALIGNMENTS | AX223015<br>AR040576                   | AR055599   | AX234354<br>AR040575 | BD002550 | AX476158<br>I89866       | AX476157 | AK169512<br>AX476156 | AR171891 | E35696 | AR098737       | E35651<br>AR078068 | AR078070 | AX291119   | AX173376 | AX184141<br>AX040679 | HSA224254 | AX405134<br>AX477864 | AX249312          | AR022354 | AX010420   | I31358     | 141297     | I12127     | AR023949 | AR164904          | AX116084 | AX117706 | AR067246 | AX378267          | AX050293 | ID             | SUMMARIES |
| ldog,F.<br>nding polynucleotides<br>)0;                                  | 2                              | DNA linear PAT 12-JAN-2001 |            | AXZZ3015 Sequençe<br>AR040576 Sequence | Sequenc    | ·                    | Gene com | <u>,</u> ~               | ٠,       | ٠, ، ، ،             | Sequençe | $\sim$ | Sequence       | ~ _                | 0        | ~ ~        | 9.       | Ψ,                   |           |                      | AX249312 Sequence |          | ) Sequence | sequence 2 | sequence 3 | sequence   | Sequence | AR164904 Sequence | Sequenc  | Sequenc  | Sequenc  | AX1996/8 Sequence | Sequenc  | Description ;. |           |

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Shimkets,R.A. and Leach,M.D.
Nucleic acids containing single nucleotide polymorph methods of use thereof Patent: WO 0151670-A 608 19-JUL-2001; Curagen Corporation (US)
Location/Qualifiers
                          Patent:
GENSET
                                   Cohen,D., Blumenfeld,M., Chumakov,I., Abderrahim,H. Obesity associated biallelic marker maps Patent: WO 0206525-A 56 24-JAN-2002;
                                                                                                                                                         AX378267 47 bp
Sequence 56 from Patent WO0206525
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1 (bases 1 to 21)

1 (coult-Newburg, L. and Pohl, M.
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AX117706
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                                                                                                                                                      Genotyping reagents, kits and methods Patent: WO 0129262-A 2829 26-APR-2001; Orchid BioSciences, Inc. (US)
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17; Conserv
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Evans.G.A. and Smith,M.W.
Method for generation of sequence sampled
Patent: US 5851760-A 594 22-DEC-1998;
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/db_xref="taxon:9606"
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594 from patent US 5851760.
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/db_xref="taxon:32630"
/note="Primer" 7 g 5 t
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 AR164904
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                                                                                                                                                                                                                                                                  artificial sequences.
1 (bases 1 to 27)
Piccult-Newburg L. and Pohl, M.
                                                                                                                                                                                                                             Genotyping reagents, kits and methods of Patent: WO 0129262-A 1207 26-APR-2001; Orchid Biosciences, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                            17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel method of genomic analysis
Patent: WO 0234939-A 12 02-MAY-2002;
MBI FERMENTAS INC (CA)
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                                                                                                      . Similarity
18; Conserv
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AR116815
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18; Conserv
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1 (bases 1 to 44)
Burgess,R., Friedrich,G., Zambrowicz,B.
Targeted gene discovery
Patent: US 6139833-A 10 31-OCT-2000;
                                                                                          Unknown
                                                                                                                                                                                                                                                                                                                                                                                             Unknown
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Methods and compositions for the diagnosis
Weight disorders, including obesity
Patent: US 6274339-A 105 14-AUG-2001;
                                       5' to 3' exonuclease mutations of thermostable Patent: US 5795762-A 28 18-AUG-1998;
                                                Abramson, R.D. and Gelfand, D.H. 5' to 3' exonuclease mutations.
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Gelfand,D.H., Lawyer,F.C. and Stoffel,S.
Mutated thermostable nucleic acid polymerase
maritima
                                                                    Ν
                                                                                                                                                                                          Abramson, R.D. and Gelfand, D.H. 5' to 3' exonuclease mutations of thermostable Patent: US 546591-A 28 14-NOV-1995;
Location/Qualifiers
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1 (bases 1 to 36)
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Pred. No. 5
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I41297
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Gelfand,D.H., Lawyer,F.C. and Stoffel,S.
Purified thermostable nucleic acid polymerase
                               CTP extended form of glycoprotein ho Patent: US 5585345-A 18 17-DEC-1996;
                                                                          Unclassified
                                                                                    Unknown
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                                                                                                                                                                                                                        8 TGTCTTTGGTCCCAGC
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Patent: US 5583979-A 270 10-DEC-1996;
Location/Qualifiers
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| AAX84625               | AAL29143 | AAX30271           | AAX56320 | AAX56322 | 420                | 132     | AAA27504           | ABI88159           | ABI88158           | AAL30574 | AAS06929 | AAC68148 | AAH91568 | ABN72411   | ABN89108           | AAD39460  | AAI65991  | AAV32917          | ABA82842           | ABA82843 | ABL40964 | ABL40963           | AAX90795      | AAZ39844 | AAZ45331 | AAQ91982 | AAI30903 | 996    | ū    |         | S  | AAX36190   | 9201    | 3841         | AAL31378           |
| <br>PCR primer for Hum | n SNP    | Neisseria gonorrhe | מ        | onorrh   | Human cell death p | n MDR-1 | Fas ligand promote | Capture oligonucle | Capture oligonúcle | z        | н        | 4        | inflamma | tococcus a | Human prostate spe | PPDK CDNA | protein a | Aspergillus niger | Human protective D |          |          | Transcription regu | n 7SL RNA spe | ime      | primer   | ĕ        | single   | single | 6    | endrocy | т. | c location | ahogany | pecific SNPE | Human SNP oligonuc |

## ALIGNMENTS

RESULT 1 AAX06149/c

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New nucleic acid segments containing polymorphic sites - e.g. detecting a disease phenotype, in forensics, paterni or genetic mapping of phenotypic traits
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                                                                                                                                                                                                                                      WPI; 1999-080963/07
                                                                                                                                                                                                                                                                                                                                                                                                                                                     (AFFY-) AFFYMETRIX INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-DEC-1998.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Polymorphism; biallelic; paternity testing; forensic; genetic mapping phenotypic typing; medicament; disease; marker; human; ss.
                                                                                                                                                                                                                                                                                                                                        Chee M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97US-0050594
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                                                                                                                                                                                                                                                                                                                                        Fan J,
                                                                                                                                                                                                                                                                                                                                        Lipshutz RJ
                                                                                                                   used for,
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paternity testing

Claim 1; Page 11; 61pp; English

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RESULT 2
ABL40961
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      application programme and including records, each record comprising information identifying a polymorphism shown in the above sequences. The products and methods can be used for analysing polymorphic sites in individuals for testing for the presence of a disease phenotype or in forensics, paternity testing or genetic mapping of phenotypic traits. They can also be used for the production of polypeptides expressed by variant genes and for the production of transgenic animals. The nucleic acid segments can also be used in the manufacture of medicaments for the
                                                                                                                                                                              Human transcription regulation factor ZFM1 isomer 19.47 and encoding polynucleotide, used in diagnosis and treatment of malignant tumors, hemopathy, human immunodeficiency virus infection, immunological diseases and inflammation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       medium for storing data for access by an application programme being executed on a data processing system. Such a method comprises a data structure stored in the computer-readable storage medium, the data
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Transcription regulation factor ZFM1 isomer 19.47; human; ZFM1; transcription regulation factor; cytostatic; haemostatic; virucide; immunomodulatory; antiinflammatory; gene therapy; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sequences AAXU6101-X06558 represent human DNA fragments which contain biallelic polymorphic markers. The base occupying the polymorphic site is indicated by the appropriate IUPAC-IUB ambiguity code. These fragments can be used in a method for determining polymorphic forms in an individual. The invention further provides an experience of the polymorphic forms in the invention further provides an experience of the polymorphic forms in the invention further provides an experience of the polymorphic forms in the invention further provides an experience of the polymorphic forms in the polymorph
                                                                                                                  Example 4; Page 21; 38pp; Chinese
                                                                                                                                                                                                                                                                                                                                      WPI; 2002-258025/30
                                                                                                                                                                                                                                                                                                                                                                                                                                                               (SHAN-) SHANGHAI BIOWINDOW GENE DEV INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-JUN-2000; 2000CN-0116826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25-JUN-2001; 2001WO-CN01050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14-MAR-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Transcription regulation factor 2FM1 isomer 19.47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-JUL-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABL40961 standard; DNA; 33 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              structure including information resident in a database used by the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      treatment or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                   Xie Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31 BP; 6 A; 9 C; 9 G; 6 T; 1 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGGTGCATACCYGTAGCCCCAGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   prophylaxis of diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention further provides computer-readable storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           67.7%;
76.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1;
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Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .1e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cDNA primer
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ZFM1 isomer 19.47 and polynuc can be expressed by standard

The invention relates to a novel human transcription regulation factor ZFM1 isomer 19.47 and polynucleotides encoding the protein. The protein can be expressed by standard recombinant methodology. The protein and

protection

or

regeneration,

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
                                                                                          can be used in screening assays, detection assays, preventive or predictive medicine, therapeutic and prophylactic treatment, and pharmacogenomics. Specifically, the SECX polypeptides and nucleic acids are useful for treating cancer; other disorders related to angiogenesis e.g. abnormal wound healing, psoriasis; neurodegenerative diseases; immune disorders; liver cirrhosis; benign tumours; fibrovystic conditions and tissue hypertrophy (e.g. benign prostatic hypertrophy); allergic
                                                                                                                                                                                                                              Polynucleotide sequences AAF23410 - AAF23419 encode secreted SECX proteins AAB49649 - AAB49658. Sequences AAF23420 - AAF23450 represent for the isolation and characterisation of the
                                                                                                                                                                                                                                                                                                                                                  New SECX polypeptides and nucleic acids useful for treating or preventing cancer, other disorders related to angiogenesis, neurodegenerative diseases, autoimmune disorders and allergic reactions
                           transplantation, atherosclerosis-associated diseases or disorders polypeptides can also be used for bone, cartilage, tendon, ligamen
                                                            reactions and conditions such as asthma and other respiratory problems; as well as in treating or preventing diseases associated with organ
                                                                                                                                                                                                              primers and probes used in the isolation and characterisation of DNA sequences of the invention. The new polypeptides and nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        encoding polynucleotides are used in diagnosis and treatment of malignant tumours, haemopathy, HIV infection, immunological diseases and inflammation. The present sequence represents the human transcription regulation factor ZFM1 isomer 19.47 cDNA cloning PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-025020/03.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shimkets RA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14-MAY-1999;
12-JAN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SECX; secreted protein; cancer; angiogenesis; wound healing
                                                                                                                                                                                                                                                                                               Example 8; Page 117; 132pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (CURA-) CURAGEN CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12-MAY-2000; 2000WO-US13291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23 - NOV - 2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    respiratory
PCR primer;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAF23445 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .mmune disorder;
             tissue growth or regeneration,
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19; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; 99US-0134315.
; 2000US-0175744.
; 2000US-0188274.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     problem; organ transplantation; contraceptive; human;
proliferative disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     primer for amplification of DNA encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP; 6 A;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fernandes
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA;
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Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 24;
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            tissue repair and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEC3
                           ligament
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                                              The
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RESULT 4
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Best Local S
Matches 18
                                                  Query Match
Best Local :
                                      Matches
                                                                                                                                                          The present invention relates to human nucleic acids containing single nucleotide polymorphisms (SNPs). These can be used in forensic and paternity tests, and to aid in the treatment of diseases associated wite aberrant protein expression, including cancer, amyloidosis, diabetes, albeiner's disease, bown's syndrome, oedema, lupus (SLE), vasculitis, qlomerulonephritis, haemolytic anaemia, thrombocytopaenia, arthritis, memologitis, muscular disorders, dementia, neurological diseases, tubero
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              inhibit thromboses, infections caused by bacteria, virus, fungi and parasites, and as a vaccine. SECX antibodies may be used to isolate detect SECX proteins, monitor protein level in tissue as part of a clinical testing procedure, treat proliferative disorders including
                                                                                                          sclerosis, male infertility, hypercalcaemia, blood pressure disorders, osteoporosis, pathogenic infections, hypercholesterolaemia, obesity or autoimmunity. The present sequence is a polymorphism-containing oligonucleotide fragment of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                           07-JAN-2000; 2000US-0174962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-OCT-2001
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                                                                                    Sequence
                                                                                                                                                                                                                                                               Claim
                                                                                                                                                                                                                                                                                               Isolated human polynucleotides containing single nucleotide polymorphisms, useful for the treatment and diagnosis of e.g. \,
                                                                                                                                                                                                                                                                                                                                       P-PSDB;
                                                                                                                                                                                                                                                                                                                                                                           Shimkets RA, Leach MD;
                                                                                                                                                                                                                                                                                                                                                                                                   (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   05-JAN-2001; 2001WO-US00322.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200151670-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     forensic test;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tumours and benign hyperplasias.
                                                                                                                                                                                                                                                                                                                                                  2001-451871/48
                                     l Similarity '19; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        coding
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              L Similarity
18; Conser
          3 GTGCATGTCTTTGGTCCCAGCTAC
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                                                                                     50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCATGCCTGTAGTCCCAGCTA 21
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BP; 4 A;
                                                                                    BP;
                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                       diabetes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nucleotide polymorphism; SNP;
; aberrant protein expression;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sequence polymorphic site SEQ ID NO:
                                                                                    14
                                                                                    A;
                                                                                                                                                                                                                                                            475pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        62.3%;
85.7%;
                                               61.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7 C;
                                                                                                                                                                                                                                                                                         for
                                                                                    12 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 50 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               G; 5 T;
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                                                                                    11 G;
                                                 Score 16; I
Pred. No. 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 16.2; DB 22
Pred. No. 4.8e+02;
                                               Pred.
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                                                              DB 22;
                                                                                    0 other;
                                    ).7e+02;
les 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     paternity test; ds.
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                                                                                                                                                                                                 f diseases associated with amyloidosis, diabetes,
                                                          Length 50;
                                    Indels
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RESULT 6
AAQ82594/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to a set of novel map-related biallelic markers, preferably located on obesity disorder-associated chromosomal regions on chromosomes 3, 10 and 19. The markers are useful for genotyping or estimating the frequency of an allele in a population, for detecting an association between a genotype or haplotype and a phenotype, e.g. a disease involving drug responses, obesity or disorders related to obesity, such as hyperuricaemia, digestive pathology, hepatic function disorders, cancer, cardiovascular disease, hypertension, hyperlipidaemia, insulin disorders, atheromatous disease and cardiac insufficiency. The marker allele and a phenotype and/or between a biallelic marker allele and a phenotype and/or between a biallelic marker allele and a phenotype and/or between a biallelic marker baplotype and a phenotype. This sequence represents a human obesity-associated biallelic marker located on chromosome 10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Set of novel map-related biallelic markers, preferably located obesity disorder-associated chromosomal regions on chromosomes and 19, useful, for e.g. detecting statistical correlations be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; Page 203; 311pp;
                                                                                                                                                                                                   AAQ82594 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 47
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-155043/20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABK40808
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAGTGCATGCCTACAGYCCCAGCT
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75.0%;
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14-SEP-1995 AAQ82594;

(first entry)

0;

Chromosome 11 (locus D118863) STS primer MS20-2

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AAH40033/c
ID AAH400
XX
AC AAH400
AC AAH400
DT 14-AUG
DT SP
XX
Single
KW Single
KW SNPE;
KW Lesch-
KW polycy
KW acute
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         these, 277 were suitable for STS primer prediction by computer analysis (using the "Primer" program available from E.Lander, MIT). The STSs and cosmids were mapped by in situ hybridsation, somatic cell hybrid analysis or both. Using this method, 370 STSs specific for human chromosome 11 were generated and most of them were regionally mapped. This procedure illustrates a novel method for sequencing complex genomes, designated "sequence sampled mapping". The sequence sampled mapping method is useful for the completion of the sequence sampled mapping method is useful for the completion of the sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        high density sequence-based maps, and ultimately, for sequencing of genomic DNA directly from cosmid clones. See AAQ82001-Q82706 and AAQ91325-Q91358 for STS primer
                                                           acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;
                                                                                       polycystic kidney disease; osteogenesis imperfecta;
                                                                                                                      SNPE; genotyping;
Lesch-Nyhan syndro
                                                                                                                                                                              Single nucleotide polymorphism; SNP; single nucleotide primer extension;
                                                                                                                                                                                                                                                                                                          14-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                         AAH40033
                                                                                                                                                                                                                                                                                                                                                                                                                                 AAH40033 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequencing complex genomes, present as fragments in a cosmid library - by sequencing end-specific nucleotides of each clone then correlating with spatial relationship of cosmid, esp. for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1995-036508/05
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07-SEP-1993;
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ibrary; chromosome 11; sequence tagged site; STS analysis;
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syndrome; muscular dystrophy; familial hypercholestero
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85.0%;
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                            investigation; paternity analysis;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             oligonucle otides are useful for determining the presence, absence or identity of a SNP and for genotyping nucleic acid samples, for e.g. to assess by association analysis the genotype of an individual or group of individuals, having a patchological phenotypic trait suspected of being caused by one or more SNPs. Phenotypic traits include diseases e.g. agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular dystrophy, familial hypercholesterolaemia, polycystic kidney disease, osteogenesis imperfecta and acute intermittent porphyria. Phenotypic traits also include symptoms of or susceptibility to multifactorial disease of which a component is or may be genetic such as autoimmune diseases, including, rheumatoid arthritis, multiple sclerosis, inflammation, cancer, nervous system diseases and infection by pathogeni microorganism. The method is also useful in forensic investigations and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide primer extension (SNPE) primers, and the sequences of regions flanking sites of single nucleotide polymorphisms SNPs. The present invention includes kits for determining the presence or absence of a SNP, using the oligonucleotides of the invention. The PCR primers are used to amplify a SNP flanking sequence, the SNPE primer is used as a genotyping primer. The oligonucleotides are useful for genotyping a nucleic acid sample by performing a single-nucleotide primer extension reaction. The
                                                                                                                                            Genomic analysis;
                                                                                                                                                                                                         Genomic
                                                                                                                                                                                                                                                                                                                                                                                                ABK92971 standard; DNA; 27
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                                                                                                                                            primer;
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                Claim 11; Page 40; 100pp; English
                                                              Preparation of biologically-activated circularly-permuted proteins by scanning permutagenesis for generating libraries of permuteins with improved the apeutic properties - \,
                                                                                                                                                                                                                                Lee
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP; 6 A; 6 C; 4 G; 8 T; 3 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2000US-0695545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2001WO-CA01487
                                                                                                                                                                                                                                                                                                                                    98US-0101908
                                                                                                                                                                                                                                                                                                                                                                                    99WO-US20891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               iry generation; therapeutic improve bio-distribution; !
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     58.5%;
68.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nucleotide sequence FGS3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 15.2; DB 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               half life;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .4e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            restriction endonuclease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         permutein; linker;
antigen;
ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                γd
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PPX CX PX PX RX
                                                                                                                                                                                                                  AAL31378/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            of display vectors presenting the expressed circularly permuted proteins is generated. A target protein can be used to affinity select the circularly permuted protein can be used to affinity select the circularly permuted protein can be used to affinity select the presenting display vectors. The selected display vectors can be isolated and analysed to identify the presented circularly permuted protein. The permuteins conform to the structure of a parent protein consisting of a segment derived from the carboxy portion of the parent protein, and a segment derived from the amino terminus of the parent protein, and a linker or chemical bond linking the amino and carboxy terminal derived portions. Nucleotide sequences AAA3576-A35943 encode linkers used to create the permuteins of the invention. The method is used to generate libraries of permuteins with improved therapeutic properties compared to their parent molecules. Permuteins with little or no activity may be used as antigens for producing antibodies which are used in immunology or immunotherapy as probes or intermediates used to construct other useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The preparation of biologically-activated circularly-permuted proteins (permuteins) comprises the use of a method comprising making a series (circularly permuted genes. The circularly permuted genes are inserted into a display vector, where they are expressed so that the proteins they encode are presented on the surface of the display vector. A librative process of the display vector. A librative process of the display vector.
                                                                                                                                                                                                                                                                                                                                                                                            Immunosuppressive; immunostimulatory; antiinflammatory; cytostatic; neuroprotective; antimicrobial; gene therapy; vaccine; amylase; can amyloid protein; angiopoietin; apptosis related protein; cadherin; cyclin; polymerase; oncogene; histone; kinase; colony stimulating f complement related protein; cytochrome; kinase; cytokine; interfer interleukin; G-protein coupled receptor; thioesterase; inflammation
                                                                                                                                                           28-DEC-1999;
27-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human SNP oligonucleotide #4586.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAL31378;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAL31378 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                permuteins. Permutei
properties compared
                                                   WPI; 2001-465210/50.
                                                                                                                                                                                                                  28-DEC-2000;
                                                                                                                                                                                                                                                  05-JUL-2001
                                                                                                                                                                                                                                                                                      WO200147944-A2
                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                              nervous system
                                                                                                                                                                                                                                                                                                                                                                                   multifactorial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-JAN-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rmuteins. Permuteins have improved biological and therapeutic operties compared to their two individual components due to a bio-distribution or half-life.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       l Similarity
17; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6 CATGTCTTTGGTCCCAGCTA 25
                                                                                                                         CURAGEN CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATGTCTTTGGGCCCTGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                         99US-0173419
2000US-0173419
                                                                                                                                                                                                                  2000WO-US35498
                                                                                                                                                                                                                                                                                                                                                              disease;
                                                                                                                                                                                                                                                                                                                                                                                 disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Α,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        58.5%;
85.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15 C;
                                                                                                                                                                                                                                                                                                                                                                SS
                                                                                                                                                                                                                                                                                                                                                                                 autoimmune
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3 15.2; рв 4...
No. 1.5e+03;
                                                                                                                                                                                                                                                                                                                                                                                   disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                  inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           36;
                                                                                                                                                                                                                                                                                                                                                                                                                     interferon;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                      factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    of
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Polymorphic nucleic acids encoding e.g. amylases, cyclins, poncogenes and histones, useful for diagnosing and treating,

cyclins, polymerases,

cancer, autoimmune diseases and infections

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RESULT 11
AAH38411/c
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primer
                                                                                                                                                   WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           multifactorial diseases with a genetic component, such as autoimmune diseases (e.g. rheumatoid arthritis, multiple sclerosis, diabetes, systemic lupus erythromatosus and Grave's disease), inflammation, cancer (e.g. cancers of the bladder, brain, breast, colon and kidney, leukaemia), diseases of the nervous system and an infection of pathogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to oligonucleotides encoding polymorphic variants of proteins related to amylasss, amyloid proteins, angiopoietin, apoptosis related proteins, cadherin, cyclin, polymerase, oncogenes, histones, kinases, colony stimulating factors, complement related proteins, cytochromes, kinesins, cytokines, interferons, interleukins, G-protein coupled receptors and thioesterases. The present sequence is one such oligonucleotide. The oligonucleotides and the peptides encoded by them may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate expression of the proteins listed above. Disorders that may be prevented, diagnosed and/or treated include
                         Sequences' AAH37205 -
                                                      Claim 1; Page 56; 83pp; English.
                                                                                                New genotyping oligonucleotide, useful for detecting the presence, absence or identity of single polynucleotide polymorphism in a nuc
                                                                                                                                                                                Picoult-Newburg L,
                                                                                                                                                                                                              (ORCH-) ORCHID BIOSCIENCES INC
                                                                                                                                                                                                                                             15-OCT-1999;
                                                                                                                                                                                                                                                                          13-OCT-2000; 2000WO-US28436
                                                                                                                                                                                                                                                                                                                                     WO200129262-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Single nucleotide polymorphism;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SNP specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAH38411 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 50
                                                                                                                                                                                                                                                                                                        26-APR-2001
                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                             polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;
acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                          SNPÉ; genotyping; agammaglobulinaemia; dia
Lesch-Nyhan syndrome; muscular dystrophy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local
                                                                                                                                                   2001-290930/30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4 TGCATGTCTTTGGTCCCAGC
         extension (SNPE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP; 10 A; 13 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SNPE primer SEQ ID
                                                                                                                                                                                                                                             99US-0160096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA;
                                                                                                                                                                                 Pohl M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4143pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      58.5%;
         AAH40944 represent PPE) primers, and the
                                                                                                                                                                                                                                                                                                                                                                                               investigation; paternity analysis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20 G; 7 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 15.2;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SNP; single nucleotide primer extension;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1207
                                                                                                                                                                                                                                                                                                                                                                                                                                        diabetes insipidus; cancer;
hy; familial hypercholesterolaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.6e+03;
3;
         PCR primers, sequences o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
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           of
        single nucleotide f regions flanking
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    50;
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                                                                                                    a nucleic
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Best Local S
Matches 18
                                                                                                                                                                                                                                                                                                                                                                                             21-JUL-1998;
20-OCT-1998;
05-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              weight regulation; cell therandanorexia; hypernian-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     osteogenesis imperfecta and acute intermittent porphyria. Phenotypic traits also include symptoms of or susceptibility to multifactorial disease of which a component is or may be genetic such as autoimmune diseases, including, rheumatoid arthritis, multiple sclerosis, inflammation, cancer, nervous system diseases and infection by pathogenic microorganism. The method is also useful in forensic investigations and paternity analysis. The present sequence represents a single nucleotide primer extension (SNPE) primer specific for a human SNP containing DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                performing a single-nucleotide primer extension reaction. The oligonucleotides are useful for determining the presence, absence or identity of a SNP and for genotyping nucleic acid samples, for e.g. to assess by association analysis the genotype of an individual or group of individuals, having a pathological phenotypic trait suspected of being caused by one or more SNPs. Phenotypic traits include diseases e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sites of single nucleotide polymorphisms SNPs. The present invention includes kits for determining the presence or absence of a SNP, using the oligonucleotides of the invention. The PCR primers are used to amplify a SNP flanking sequence, the SNPE primer is used as a genotyping primer. The oligonucleotides are useful for genotyping a nucleic acid sample by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAZ92014 standard;
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dystrophy, familial hypercholesterolaemia, polycystic kidney disease,
                                                                                                                  New human and murine mahogany genes, useful, treatment of body weight disorders -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  03-FEB-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-JUN-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 27 BP; 7 A; 7 C; 6 G; 6 T; 1 other;
                                                                                                                                                                                                              WPI; 2000-195103/17.
                                                                                                                                                                                                                                                                          Moore
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200005373-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mammalia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hyperphagia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mahogany protein gene exon 28+UTR primer CelegE170.
                                                                                                                                                                                                                                                                                                                                    (MILL-) MILLENIUM PHARM INC
                                                                                                                                                                                                                                                                       ζ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TAGGGCAAGTCNTTAGTCCAAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hyperpigmentation; increased metabolic rate ia; Antiobesity; antianorexic; anticachexic;
                                                                                                                                                                                                                                                                       Nagle DL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                             98US-0093630.
98US-0104978.
99US-0245041.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99WO-US16484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                57.7%;
75.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ВÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          regulatory defect; gene therapy; obesity; y; body weight disorder; cachexia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .8e+03;
                                                                                                                                                  e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                     for
                                                                                                                                                  diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             muscular
                                                                                                                                                  and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SS
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Example;

Fig 5; 188pp;

English

This sequence represents a PCR primer

for a mahogany gene of

the

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RESULT 13
AAX36190/c
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Best Local S
Matches 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    invention. The mahogany genes are used: (i) to produce recombinant mahogany (mg) proteins (II); (ii) as a source of antisense, ribozyme or triplex-forming therapeutics; (iii) as a source of diagnostic probes and primers for detecting expression of mg genes or mutations, regulatory defects, in this gene, or for isolation of related sequences; and (iv) in (cell-based) gene therapy. (II) are used to raise specific antibodies (Ab); to identify other (extra)cellular products involved in weight regulation, and to screen for agents that disrupt interaction between (II) and other macromolecules. The Ab are used to detect abnormal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     levels (or function) of (II) (for diagnosis, prognosis or monitoring of treatment); to evaluate (II)-expressing cells intended for cell therapy, and as therapeutic mg inhibitors. Cells that express the mg gene (or contain the mg polypeptide) are used to identify agents (A) that modulate mg activity. (A) are potentially useful for the treatment of body weight disorders, particularly obesity, cachexia or anorexia, or other
                                                                               The specification describes an infectious virus which comprises recombinant viral genome and a chimeric integrase. The chimeric integrase can provide an infectious recombinant virus that is confinecting higher eukaryotic cells and incorporates a chimeric
                                                                                                                                                                                                                                                         WPI; 1999-287449/24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mutagenesis; gene trapping; retroviral integration;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       conditions associated with the mg gene such as hyperpigmentation, hyperphagia and disorders that result in increased metabolic rate
                   mutagenesis,
                                                                                                                                                                      Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                             06-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                              18-FEB-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX36190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAX36190 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
              integrase activity that has been engineered to target and guide viral integration to specific regions of the genome of living cells. The viruses can be used in methods for the rapid identification and mutagenesis, via gene trapping, of genes encoding, regulated by, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                W09907389-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Infectious virus; recombinant viral genome; chimeric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Intronic location
                                                                                                                                                                                                          chimeric
                                                                                                                                                                                                                        infectious viruses
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18; Conser
                                                                                                                                                                                                                                                                                                                          LEXICON GENETICS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               formation; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGGTTCATGCTTTTTATCCCAGC 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGGTGCATGTCTTTGGTCCCAGC 23
                                                                                                                                                                                                      integrase, used
                                                                                                                                                                                                                                                                                          Friedrich
                                                                                                                                                                     Fig 10B; 95pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP; 13
via gene trapping, of genes encoding,
target sequences for DNA binding protu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                          97US-0907598
                                                                                                                                                                                                                                                                                                                                                                                           98WO-US16373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             where the LTR trapping construct integrates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; 5 C; 6 G; 4 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 57.78;
78.38;
                                                                                                                                                                                                                                                                                         GA,
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                                                                                                                                                                                                    comprising a :
d particularly
                                                                                                                                                                                                                                                                                         Sands
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 15;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                         ΑT,
                                                                                                                                                                                                                                                                                         Zambrowicz
                                                                                                                                                                                                    recombinant v
y for targeted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.8e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         other;
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proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 28
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                                                                                                                                                                                                 viral genome and
ed gene discovery
                                                                                                  that is capable
                                                                                  chimeric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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Best Local S
Matches 18
                                                                 The present invention relates to oligonucleotides encoding polymorphic variants of proteins related to amylases, amyloid proteins, angiopoletin apoptosis related proteins, cadherin, cyclin, polymerase, oncogenes, histones, kinases, colony stimulating factors, complement related proteins, cytochromes, kinesins, cytokines, interferons, interleukins, G-proteins, coupled receptors and thioesterases. The present sequence is one such oligonucleotide. The oligonucleotides and the peptides encoded by them may be used in the prevention, diagnosis and treatment of
diseases associated with inappropriate expression of the proteins listed above. Disorders that may be prevented, diagnosed and/or treated include multifactorial diseases with a genetic component, such as autoimmune diseases (e.g. rheumatoid arthritis, multiple sclerosis, diabetes,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Immunosuppressive; immunostimulatory; antiinflammatory; cytostatic; neuroprotective; antimicrobial; gene therap; vaccine; amylase; can amyloid protein; angiopoietin; apoptosis related protein; cadherin; cyclin; polymerase; oncogene; histone; kinase; colony stimulating f;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 random integration of viral DNA into the host genome is reduced. The allows for a more efficient and high throughput analysis of target sites. The present sequence represents the sequence of the intronic location where the LTR trapping construct integrates.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     for retroviral integration and provirus formation to occur at a location within the genome. By deleting the naturally occurring nonspecific DNA binding domain of the integrase, the amount of
                                                                                                                                                                                                                              Claim 1; Page 2217; 4143pp; English
                                                                                                                                                                                                                                                                        Polymorphic nucleic acids encoding e.g. amylases, cyclins, polymerases, oncogenes and histones, useful for diagnosing and treating, e.g. cancer, autoimmune diseases and infections.
                                                                                                                                                                                                                                                                                                                                                                        Shimkets RA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           multifactorial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        complement related protein; cytochrome; kinesin; cytok interleukin; G-protein coupled receptor; thioesterase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 44 BP; 9 A; 14 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                            27-DEC-2000; 2000US-0173419
                                                                                                                                                                                                                                                                                                                                                                                                                                                              28-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-DEC-2000; 2000WO-US35498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   05-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200147944-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         nervous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human SNP oligonucleotide #2902.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAL29694 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                         (CURA-) CURAGEN CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 TGGTGCATGTCTTTGGTCCCAGC 23
                                                                                                                                                                                                                                                                  autoimmune diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TAGCGCATGCCTTTAGTCCCACC 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first
                                                                                                                                                                                                                                                                                                                                                                        Leach
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              99US-0173419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               57.7%;
78.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         autoimmune disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12 G; 9 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                  infections
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9e+03;
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د
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 44;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cytokine;
                                                                                                                                                                       encoding polymorphic proteins, angiopoietin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          interferon;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         at any
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cancer;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          factor;
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Search completed: June 21, 2003, 22:26:21 Job time: 145:594 secs
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                                                                                                                                                                 RESULT 15
ABN87593/c
ID ABN87593 standard; DNA; 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SSSSSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
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                                                                                                          Query Match
Best Local S
Matches 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 18
                                                                                                                                                                                        The present invention describes human oligodendrocyte-myelin glucoprotein 9.68 (I). Also described is a method for producing (I) using DNA recombination technology. (I) can be used in the treatment of several diseases, such as nervous system dysfunction related diseases. The present sequence represents a probe for (I), which is used in an example from the present invention.
                                                                                                                                                              Sequence 41 BP; 5 A; 8 C; 16 G; 12 T; 0 other;
                                                                                                                                                                                                                                                                                  Example 6; Page 22 (Disclosure); 34pp; Chinese.
                                                                                                                                                                                                                                                                                                                Novel polypeptide--oligodendrocyte-myelin glucoprotein 9.68 and polynucleotide for encoding the polypeptide -
                                                                                                                                                                                                                                                                                                                                                         WPI; 2002-292915/34.
                                                                                                                                                                                                                                                                                                                                                                                    мао у,
                                                                                                                                                                                                                                                                                                                                                                                                                                       07-JUL-2000; 2000CN-0117081.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-JUL-2000; 2000CN-0117081.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CN1333225-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; oligodendrocyte-myelin glucoprotein 9.68; probe; ss; nervous system dysfunction related disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oligodendrocyte-myelin glucoprotein 9.68 probe 2 SEQ ID NO:9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABN87593;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 50 BP; 14 A; 11 C; 12 G; 13 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  systemic lupus erythromatosus and Grave's disease), inflammation, cancer (e.g. cancers of the bladder, brain, breast, colon and kidney, leukaemia), diseases of the nervous system and an infection of pathogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JAN-2002.
                                                                                                                                                                                                                                                                                                                                                                                                              (SHAN-) SHANGHAI BIODOOR GENE DEV CO LTD
                                                                                                                        Local Similarity
                                                   19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 TGGTGCATGTCTTTGGTCCCAGC 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         l Similarity
18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                    Xie Y;
                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                     56.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      57.7%;
78.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ВP
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2: /cgn2_6/ptodata/l,
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| matches .                  | S DERIVED<br>N ARACHIDO<br>,638<br>,638<br>330<br>200<br>207<br>917<br>917<br>917  | ALIGNMENTS | 348-891A-16<br>905-817-16<br>907-817-16<br>471-058-4<br>471-057-4<br>178-476A-17<br>257-073-136 | 4 US-07-987-264-18<br>4 US-07-987-264-24<br>4 US-09-489-979-2<br>4 US-09-302-620B-76<br>4 US-09-609-816-21<br>1 US-08-295-676-15<br>2 US-08-295-675-15<br>3 US-08-362-525-5<br>3 US-08-362-525-5<br>4 US-09-641-638-1157<br>6 5464943-3<br>4 US-09-071-433-57  | 927-391-21 |
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RESULT 2 US-08-117-952-594/c ; Sequence 594, Application US/08117952 ; Patent No. 5851760

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                                                                                                                                                                                                                                                                                                                  Sequence 105, Application US/09245041
Patent No. 6274339
                                                                        EARLIER APPLICATION NUMBER: 60/104,978 EARLIER FILING DATE: 1998-10-20 NUMBER OF SEQ ID NOS: 131
                                                                                                                           CURRENT APPLICATION NUMBER: US/09/245,041
CURRENT FILING DATE: 1999-02-05
EARLIER APPLICATION NUMBER: 60/093,630
EARLIER FILING DATE: 1998-07-21
                                                                                                                                                                                                      TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR THE DIAGNOSIS AND TREATMENT TITLE OF INVENTION: OF BODY WEIGHT DISORDERS INCLUDING OBESITY FILE REFERENCE: 7853-136
                                                                                                                                                                                                                                                       APPLICANT: MOORE, K. APPLICANT: Nagle, D.
                                                                                                                                                                                                                                                                                             ENERAL INFORMATION:
EQ ID NO 105
LENGTH: 28
TYPE: DNA
                                                           SOFTWARE:
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SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
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FILING DATE: 15-JUN-1993
ATTORNEY/AGENT INFORMATION:
NAME: Reiter, Stephen E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
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CORRESPONDENCE ADDRESS:
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OPERATING SYSTEM:
SOFTWARE: Patenti
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CITY: Los Angeles
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444 South Flower Street, Suite 2000
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US-08-907-598-10/c
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                                                                                                                                                                                                   ; ANTI-SENSE: NO
US-08-907-598-10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 57.7
Best Local Similarity 78.3
Matches 18; Conservative
Sequence 84, Application US/09851896 Patent No. 6410325
                                                                                                                                          Query Match
Best Local Similarity
Matches 18; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 10, Application US/08907598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                      REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 85:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 493-4935
                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION: NAME: Coruzzi, Laura A.
                                                                                                                                                                                                                              MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY:
                                                                                                                                                                                                                                          TOPOLOGY:
                                                                                                                                                                                                                                                      STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STATE: New York
                                                                                                                                                                                                                                                                         TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP:
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                                                                                                                                                                                                                                                                                     LENGTH:
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                                                                                    26 TAGCGCATGCCTTTAGTCCCACC 4
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                                                                                                                                                                                                                                                                                                                                66141
                                                                                                                                                                                                                                                                                     44 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                          (650) 493-5556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Burgess, Rob
Friedrich, Glenn
                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sands, Arthur
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Zambrowicz, Brian
                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PENNIE & EDMONDS LLP
                                                                                                                                                                                                                             DNA (genomic)
                                                                                                                                                                                                                                                          unknown
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78.3%;
                                                                                                                                                       57.7%;
78.3%;
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                                                                                                                                        Score 15; DB 3; Pred. No. 2.1e+02; Score 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 15;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                       8535-015-999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2e+02;
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                                                                                                                                                                    Length 44;
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GENERAL INFORMATION:

APPLICANT: C. Frank Bennett

Susan M.

Freier

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Best Local Similarity
"~+~hes 16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/09/851,896
CURRENT FILING DATE: 2001-05-08
NUMBER OF SEQ ID NOS: 89
SEQ ID NO 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                               Matches
                                             Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOLIPASE A2, GROUP VI (CA2+-INDEPENITITLE OF INVENTION: EXPRESSION FILE REFERENCE: RTS-0220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                               INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: Antisense Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                        REGISTRATION NUMBER: 32,630
REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (510) 814-2863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Gelfand, David H. APPLICANT: Lawyer, Frances C. APPLICANT: Stoffel, Susanne
                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                SOFTWARE: WordPerfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 19930203
                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
                                                                                                      MOLECULE TYPE: Other Nucleic Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: Apple N
OPERATING SYSTEM:
SOFTWARE: WordPer
                                          Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Nutley
                                                                                                                       TOPOLOGY:
                                                                                                                                  STRANDEDNESS:
                                                                                                                                                  TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Diskette, 3.50 inch, 800 Kb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET:
                                                                                                                                                                  LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE:
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                             l Similarity
19; Conserv
1 TGGTGCATGTCTTTGGTCCCAGCTAC 26
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                                                                                                                                                                   36 bases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                340 Kingsland
                                                                                                                                                                                                                             (510)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      USA
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                                                                                                                       linear
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                                                                                                                                  single
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                                          56.9%;
73.1%;
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                                                                                                                                                                                                 32:
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Pred. No. 2.
                                          Score 14.8;
Pred. No. 2
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                                            .5e+02;
                                                          DB 1;
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                                                        Length 36;
                             Indels
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RESULT 7
US-07-977-434-28
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Patent No.
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                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US
FILING DATE: 12-JAN-19
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
APPLICATION NUMBER: US
FILING DATE: 17-JUN-19
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
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APPLICATION NUMBER: US 5
FILING DATE: 28-SEP-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: WordPerfect 2.1 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                      FILING DATE: 15-AUG-
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 22-AUG-1986 PRIOR APPLICATION DATA:
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APPLICATION NUMBER: 15-MAY-
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APPLICATION NUMBER:
FILING DATE: 28-SEP-
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PRIOR APPLICATION DATA:
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                                                               ATTORNEY/AGENT INFORMATION:
                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER:
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APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
ELECOMMUNICATION INFORMATION:
                                                                                                                                 APPLICATION NUMBER: US 609,157 FILING DATE: 02-NOV-1990
                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: WO PFILING DATE: 21-DEC-1990
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CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STATE: New Jersey
ZIP: 07110-1199
                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                     APPLICATION NUMBER:
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               REGISTRATION NUMBER: 31, REFERENCE/DOCKET NUMBER:
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5. 5466591
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                                                                                                                                                                                                                                                                                                                                        15-AUG-1991
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28-SEP-1990
                                                                                                                                                                                      22-DEC-1989
                                                                                                                                                                                                                                      IMBER: US 585,471
20-SEP-1990
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                                                                                                    US 557,517
                                                                                                                                                                                                                                                                                                                                                                                                         US 899,241
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                                                                                                                                                                                                      US 455,611
                                                                                                                                                                                                                                                                                                       WO PCT/US90/07641
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            Case No.
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                 5466591 8753
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NFORMATION FOR SEQ ID NO:

(510) 814-2972 SEQ ID NO: 28

TELEPHONE:

SEQUENCE CHARACTERISTICS LENGTH: 36 nucleotide:

leotides

ENGTH:

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ANTI-SENSE:
US-07-977-434-28
                                   Query Match
Best Local Similarity
                         Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
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                                                                                                                                                                  NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ent No.
                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM: MEDIUM TYPE: Diskette,
                                                                                     TOPOLOGY: 11
                                                                                                                                       SEQUENCE CHARACTERISTICS:
LENGTH: 36 bases
                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                     FILING'DATE: 03-FEB-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE: Nutley
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PPLICANT:
                                                                                                                                                                                                                                                                                                                                                                         OPERATING SYSTEM: Macinton
SOFTWARE:
                                                                                                                STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/08/475,231 FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRANDEDNESS: single
                                                                                                                                                                                                        TELEPHONE:
                                                                                                                                                                                                                                         NAME: Stacey R. Sias, Ph.D. REGISTRATION NUMBER: 32,630
                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: WordPerfec
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TGGTGCATGTCTTTGGTCCCAGCTAC 26
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  340 Kingsland
                                                                                                                                                                                                                                                                                                                                                                                                                                                 USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gelfand, David H.
Lawyer, Frances C.
                          Conservative
                                                                                                                                                                                           (510) 814-2977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Stoffel, Susanne
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                                                                                                     linear
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                                                                                       Other Nucleic Acid
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                                                                                                              single
                                                                                                                                                                                                        814-2863
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73.1%;
                                    56.9%;
73.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Polymerase Enzyme from Thermotoga Maritima
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Street
                                                                                                                                                                  32
                                                                                                                                                                                                                                                                                                                                                                                                          3.50 inch, 800 Kb storage
                         0,
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                       Score 14.8; DB 1;
Pred. No. 2.5e+02;
0; Mismatches 7
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                                                  DB 1;
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                                                Length 36;
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CURRENT APPLICATION DATA:
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              FILING DATE: 02-NOV-
PRIOR APPLICATION DATA:
                                                           FILING DATE: 22-DEC-: PRIOR APPLICATION DATA:
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                                                                                                                         APPLICATION NUMBER: US 5
                                                                                                                                                                                                                         APPLICATION NUMBER: US 7. FILING DATE: 15-AUG-1991
                                              APPLICATION NUMBER:
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APPLICATION NUMBER:
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22-AUG-1986
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28-SEP-1990
                               02-NOV-1990
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21-DEC-1990
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12-JAN-1988
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15-MAY-1990
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                                            US 609,157
us 557,517
                                                                                             US 455,611
                                                                                                                                                                                                                                          US 746,121
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                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 746,121
FILING DATE: 15-AUG-1991
                                                                                                                                                                                                               PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 523,394
                                                                                                                                                                                                                                                         MOLECULE TYPE:
HYPOTHETICAL:
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TELECOMMUNICATION INFORMATION:
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PRIOR APPLICATION DATA:

OR 190,490
                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: WordPerfect
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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APPLICATION NUMBER:
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APPLICANT: Abramson, Richard
                                                                                                  PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: FILING DATE: 22-AU
                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 590,466 FILING DATE: 28-SEP-1990
                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 50 FILING DATE: 28-SEP-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 1400 Fifty-third Street CITY: Emeryville
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                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: POFILING DATE: 19910930
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SOFTWARE: WordPerfect 5.0
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                                                                                                                  JMBER: US 063,509
17-JUN-1987
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73.1%;
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                                                                                     US 899,241
WO PCT/US90/07641
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Pred. No. 2.5e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                       Patent No. 5582979
GENERAL INFORMATION:
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                      ATTORNEY/AGENT INFORMATION:
NAME: Sara, Charles S.
REGISTRATION NUMBER: 30,492
REFERENCE/DOCKET NUMBER: 09865.601
                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION:
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ANTI-SENSE:
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                                                                                  APPLICATION NUMBER: US 0 FILING DATE: 21-APR-1989
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Sequence 270, Application US/08222177A Patent No. 5582979
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              CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                   SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                        COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS
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NAME: Sias Ph.D, Stacey R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 5:
FILING DATE: 24-JUL-1990
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                                                                                                                      MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
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02-NOV-1990
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73.1%;
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US 07/341,562
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                                                                   US/08/222,177A
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Pred. No. 2.5e+02;
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RESULT 13
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US-08-239-256-18
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Best Local :
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APPLICANT: BOIME, IRVING
APPLICANT: MATZUK, MARTIN M.
APPLICANT: KEENE, JEFFREY L.
APPLICANT: KEENE, JEFFREY L.
TITLE OF INVENTION: CTP EXTENDED FORM OF
                                                                                                                                                                                                                                     NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                           TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                         REGISTRATION NUMBER: 29,959
REFERENCE/DOCKET NUMBER: 29,
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 887-1500
                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION: NAME: MURASHIGE, KATE H.
                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES:
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                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE:
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                                                                                              . Similarity
18; Conserv
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                                                                 GTGCATGTCTTTGGTCCCAGCTAC 26
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93.8%;
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                                                                                            Score 14.4; DB 1;
Pred. No. 4e+02;
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Pred. No. 3.6e+02;
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5177193-20 ; Patent No.
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                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: Primer US-09-286-959B-12
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US-09-286-959B-12
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                                                                                                                                                                                            Sequence 9, Application US/08283857 Patent No.: 5792742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/080,783
PRIOR FILING DATE: 1998-04-06
NUMBER OF SEQ ID NOS: 24
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 18; Conserv
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Best Local Similarity
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                                                                                                                                                                               GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Le, Siyuan TITLE OF INVENTION: TELOMERAS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Johns Hopkins University
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 20
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Artificial Sequence
                                                               APPLICANT: BARON, MARTÍN
APPLICANT: CAMPBELL, Tain D.
APPLICANT: WILLIAMS, Michael, J.
TITLE OF INVENTION: FIBRONECTIN FIBRIN-BINDING PEPTIDES,
TITLE OF INVENTION: CODING THEREFOR AND USERS THEREOF
                               NUMBER OF SEQUENCES: 1
                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 01-JUN-1990 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION DATA: APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: BOIME, IRVING; MATZUK, MARTIN M.
TITLE OF INVENTION: MODIFIED FORMS OF REPRODUCTIVE HORMONES
NUMBER OF SEQUENCES: 26
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                    ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 313,646
                                                                                                                                                                                                                                                                                                                                                           16;
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E: BROWDY AND NEIMARK
419 Seventh Street, N.W., Suite 300
                                                                                                                                              GOLD, Leslie I.
ROSTAGNO, Agueda A.
                                                                                                                                                                                                                                                                                                                                                          Conservative
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                                                                                                                                                                                                                                                                                                                                                                         54.6%;
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75.0%;
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Pred. No. 4e+02;
                                                                                                                                                                                                                                                                                                                                                                         Score 14.2; DB 4;
Pred. No. 4.4e+02;
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STREET:

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CITY: Washington
STATE: D.C.
COUNTEX: USA
ZIP: 20004
COMPUTER READABLE FORM:
MEDLUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION NUMBER: US/08/283,857
FILING DATE: 01-AUG-1994
CLASSIFICATION: 435
PRIOR APPLICATION NUMBER: US 07/714,134
FILING DATE: 14-JUN-1991
ATTORNEY/AGENT INFORMATION:
NAME: BROWDY, ROSET UNBER: GGLD=1A
FILING DATE: 14-JUN-1991
ATTORNEY/AGENT INFORMATION:
NAME: BROWDY, ROSET UNBER: GGLD=1A
FILEDOMMUNICATION INFORMATION:
FELEPOME: 202-638-5197
FILEFAX: 202-737-3528
INFORMATION FOR SED ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 42 nucleotides
TYPE: NUCLeic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-283-857-9

QUETY MATCH
DATE: DNA
US-08-283-857-9

GATGTCTTTGGTCCCAGGT 24

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6 CATGTCTTTGGTCCCAGGT 24

Db time: 32.875 secs

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Result
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Listing first
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seq length: 50

    nucleic search, using sw model

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Match
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    1042519 seqs, 733713590 residues
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGGTGCATGTCTTTGGTCCCAGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                /cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US09_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US09_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US10_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US10_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US10_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US10_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US06_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /cgn2_6/ptodata/2/pubpna/US07
/cgn2_6/ptodata/2/pubpna/PCT_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/PCTUS_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                         Length DB
    1 0%
1 100%
1 45 summaries
              US-10-098-263B-127897
US-09-860-738C-35
US-09-860-738C-48
US-09-860-738C-48
US-09-860-738C-53
US-09-860-738C-55
US-09-860-738C-55
US-09-860-738C-55
US-09-860-738C-55
US-09-860-738C-36
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                                                                                                                                                                                                                                                                                                                         ID
                                                                                                                                                                                                                         US-09-893-238-105
                                                                                                                                                                                                                                                                                                                                                                        SUMMARIES
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496.907 Million cell updates/sec
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Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             _NEW_PUB.seq:*
             Sequence 10, Appl
Sequence 10, Appl
Sequence 10, Appl
Sequence 105, Appl
Sequence 1705, Appl
Sequence 17097,
Sequence 35, Appl
Sequence 38, Appl
Sequence 48, Appl
Sequence 50, Appl
Sequence 53, Appl
Sequence 74, Appl
Sequence 74, Appl
Sequence 45, Appl
Sequence 54, Appl
Sequence 50, Appl
Sequence 54, Appl
Sequence 50, Appl
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US-09-964-667-10
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                                                                                                             INFORMATION FOR SEQ ID NO: 10:
TOPOLOGY: linear
MOLECULE TYPE: cDNA
SEQUENCE DESCRIPTION: SEQ ID NO: 10:
                                           SEQUENCE CHARACTERISTICS:
LENGTH: 26 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                          REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
                                                                                                                            TELEPHONE: 202-371-2600
TELEFAX: 202-371-2540
                                                                                                                                                                                          NAME: Esmond, Robert W. REGISTRATION NUMBER: 32,893
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|   | 45               | 44                    | 43                    | 42                    | 41                   | 40                   | 39                   | 38                | 37                | 36                 | 35                | 34                | 33                    | 32                    | 31                  | 30                | 29              | 28                | 27               | 26                | 25                 | 24                    | 23                   | 22                | 21                | 20                 |
|---|------------------|-----------------------|-----------------------|-----------------------|----------------------|----------------------|----------------------|-------------------|-------------------|--------------------|-------------------|-------------------|-----------------------|-----------------------|---------------------|-------------------|-----------------|-------------------|------------------|-------------------|--------------------|-----------------------|----------------------|-------------------|-------------------|--------------------|
|   | 13.2             | 13.2                  | 13.2                  | 13.2                  | 13.2                 | 13.2                 | 13.2                 | 13.2              | 13.4              | 13.4               | 13.4              | 13.4              | 13.4                  | 13.4                  | 13.4                | 13.4              | 13.4            | 13.4              | 13.4             | 13.6              | 13.6               | 13.6                  | 13.6                 | 13.8              | 14                | 14                 |
|   | 50.8             | 50.8                  | 50.8                  | 50.8                  | 50.8                 | 50.8                 | 50.8                 | 50.8              | 51.5              | 51.5               | 51.5              | 51.5              | 51.5                  | 51.5                  | 51.5                | 51.5              | 51.5            | 51.5              | 51.5             | 52.3              | 52.3               | 52.3                  | 52.3                 | 53.1              | 53.8              | 53.8               |
|   | 28               | 25                    | 25                    | 25                    | 25                   | 25                   | 25                   | 22                | 42                | 37                 | 32                | 31                | 25                    | 25                    | 25                  | 21                | 21              | 21                | 17               | 33                | 31                 | 25                    | 25                   | 42                | 37                | 31                 |
|   | 9                | 9                     | 9                     | 9                     | 9                    | 9                    | 9                    | 9                 | 10                | 9                  | 10                | 9                 | 9                     | 9                     | 9                   | 10                | 10              | 9                 | 10               | 10                | 10                 | 9                     | 9                    | 9                 | 9                 | 10                 |
|   | US-10-198-069-38 | US-10-098-263B-127898 | US-10-098-263B-116373 | US-10-098-263B-111162 | US-10-098-263B-76416 | US-10-098-263B-59077 | US-10-098-263B-36336 | US-10-198-069-39  | US-09-795-006A-13 | US-09-780-164-1792 | US-09-795-006A-4  | US-09-912-263-435 | US-10-098-263B-121069 | US-10-098-263B-105579 | US-10-098-263B-1457 | US-09-922-101-8   | US-09-951-401-8 | US-09-951-402-8   | US-09-877-156-11 | US-09-922-261-134 | US-09-801-274-1727 | US-10-098-263B-130235 | US-10-098-263B-23537 | US-09-733-692A-30 | US-10-001-876-109 | US-09-801-274-1391 |
| , |                  |                       | Sequence 116373,      | Sequence 111162,      | Sequence 76416; A    | Sequence 59077, A    | Sequence 36336, A    | Sequence 39, Appl | Sequence 13, Appl | Sequence 1792, Ap  | Sequence 4, Appli | Sequence 435, App | Sequence 121069,      | Sequence 105579,      | Sequence 1457, Ap   | Sequence 8, Appli | `               | Sequence 8, Appli | 11, A            | 134, A            | Sequence 1727, Ap  | Sequence 130235;      | Sequence 23537, A    | Sequence 30, Appl | Sequence 109, App | Sequence 1391, Ap  |

ALIGNMENTS

#### Sequence 10, Application US/09964667 Publication No. US20030033621A1 GENERAL INFORMATION: CURRENT APPLICATION DATA: APPLICATION NUMBER: US/09/964,667 FILING DATE: 28-Sep-2001 CLASSIFICATION: <Unknown> ZIP: 20005-3934 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, Version ADDRESSEE: Sterne, TITLE OF INVENTION: Transgenic Animals and Cel Screening Drugs Effective APPLICANT: de la Monte, Suzanne ADDRESSEE: Sterne, Kessler, Goldstein STREET: 1100 New York Ave., Suite 600 COUNTRY: USA CITY: Washington OF SEQUENCES: Wands, Jack R. b Screening Drugs Effect of Alzheimer's Disease Cell Lines ive for the & Fox, # |for Treatment Preventio

0609.4370000

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US-09-964-412-10
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US-09-964-666-10
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                                                                      Sequence 10, Application U
Patent No. US20020129391A1
GENERAL INFORMATION:
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Best Local S
Matches 26
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 28-Sep-2001
CLASSIFICATION: <UNKNOWN>
ATTORNEY/AGENT INFORMATION:
NAME: Esmond, Robert W.
REGISTRATION NUMBER: 32,893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/964,666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: 0609.4370000 TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein & Fox, P.L.L.C STREET: 1100 New York Ave., Suite 600
                        TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE DESCRIPTION: SEQ ID NO: 10:
                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: Transgenic Animals and Cell Lines for Screening Drugs Effective for the Treatment or Prevention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                       1 TGGTGCATGTCTTTGGTCCCAGCTAC 26
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                                                                                                                                                                                                                   TGGTGCATGTCTTTGGTCCCAGCTAC 26
                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 26 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE:
                                                                                                                    Application US/09964412
                                                                                                                                                                                                                                                                                               Conservative
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                                        de la Monte, S
Wands, Jack R.
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Wands, Jack R.
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Transgenic Animals and Cell Lines for Screening Drugs Effective for the Treatment or Prevention
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                                                          Suzanne
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                                                                                                                                                                                                                                                                                                               Score 26; I
Pred. No. 0
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Pred. No. 0.0055;
                                                                                                                                                                                                                                                                                             Mismatches
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0.0055;
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                ; OTHER INFORMATION: Description of Artificial Sequence: Synthetic; OTHER INFORMATION: oligonucleotide US-10-198-069-46
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                                                                                                                                                  SOFTWARE: PatentIn Ver. SEQ ID NO 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 46, Application US/10198069 Publication No. US20030096756A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                         PRIOR FILING DATE: 2001-07-19
PRIOR APPLICATION NUMBER: 60/306,150
PRIOR FILING DATE: 2001-07-19
PRIOR APPLICATION NUMBER: 60/331,477
PRIOR FILING DATE: 2001-11-16
NUMBER OF SEQ ID NOS: 48
                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: PEPTIDES EFFECTIVE IN TITLE OF INVENTION: CONDITIONS REQUIRING TITLE OF INVENTION: CELLS
                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/10/198,069
CURRENT FILING DATE: 2002-07-19
                                                                                                                                                                                                                                                                                                                                                                    FILE REFERENCE: 59003.000009
                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: AVERBACK,
                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/306,161
                                                                              FEATURE:
                                                                                          ORGANISM: Artificial Sequence
                                                                                                              TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION FOR SEQ ID NO: 10:
                                                                                                                                    LENGTH: 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 28-Sep-2001
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Esmond, Robert W.
REGISTRATION NUMBER: 32,893
REFERENCE/DOCKET NUMBER: 0609.4370000
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Pattentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/964,412
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compati
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein & Fox, P.L.L.C.
STREET: 1100 New York Ave., Suite 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: CDNA SEQUENCE DESCRIPTION: SEQ ID NO: 10:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26;
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TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 202-371-2540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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Pred. No.
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0.0055;
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Gaps

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Length 26; Indels

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                                                                                                                                                   ; ORGANISM: Homo sapien US-10-098-263B-127897
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; Sequence 127897, Application US/10098263B

; Publication No. US20030104410A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
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                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 131066 .
SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
SEQ ID NO 127897
                                                                                  Matches
                                                                                                   Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
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LENGTH: 28
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                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/10/098,263B
CURRENT FILING DATE: 2003-01-08
PRIOR APPLICATION NUMBER: 60/276,759
PRIOR FILING DATE: 2001-03-16
                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Mittman, Michael
TITLE OF INVENTION: Human Microarray
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/104,978 PRIOR FILING DATE: 1998-10-20 NUMBER OF SEQ ID NOS: 129
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PRIOR TILING DATE: 1999-02-05
PRIOR APPLICATION NUMBER: 60/093,630
PRIOR FILING DATE: 1998-07-21
PRIOR PRIOR DATE: 1998-07-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE TREATMENT AND TITLE OF INVENTION: DIAGNOSIS OF BODY WEIGHT DISORDERS, INCLUDING FILE REFERENCE: 7853-237
                                                                                                                                                                                                                                                                                                                                                       FILE REFERENCE: 3118.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/893,238
CURRENT FILING DATE: 2001-06-27
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: FastSEQ for Windows Version 3.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
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         105, Application US/09893238
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78.3%;
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Pred. No. 8.
                                                                                                 Score 14.8; DB 9
Pred. No. 1.1e+03
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US-09-860-738C-48
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US-09-860-738C-35
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Publication No. US20030040620Al
GENERAL INFORMATION:
APPLICANT: Langmore, John
APPLICANT: Makarov, Vladimir
TITLE OF INVENTION: Method of Producing a DNA Library Using Positional Amplificati
FILE REFERENCE: UMIC:047US0/10103482
CURRENT APPLICATION NUMBER: US/09/860,738C
CURRENT FILING DATE: 2001-05-18
NUMBER OF SEQ ID NOS: 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 121
SOFTWARE: PatentIn version 3.1
SEQ ID NO 38
LENGTH: 23
TYPE: DNA
                                                                                                                GENERAL INFORMATION:
                                                                                                                               Sequence 48, Application US/09860738C Publication No. US20030040620A1
                                                                                                                                                                                                                                                                                                                Matches
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Langmore, John
APPLICANT: Makarov, Vladdimir
APPLICANT: Makarov, Vladdimir
TITLE OE INVENTION: Method of Producing a DNA Library Using Positional Amplificati
FILE REFERENCE: UMIC:047US0/10103482
CURRENT APPLICATION NUMBER: US/09/860,738C
CURRENT FILING DATE: 2001-05-18
APPLICANT: Langmore, John APPLICANT: Makarov, Vladimir APPLICANT: Makarov, Vladimir TITLE OF INVENTION: Method of Producing a DNA Library Using Positional Amplificati FILE REFERENCE: UMIC:047050/10103482 CURRENT APPLICATION NUMBER: US/09/860,738C CURRENT FILING DATE: 2001-05-18
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TYPE: DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Unknown
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81.0%;
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Pred. No. 1
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TITLE OF INVENTION: Makarov, Vladimir
FILE REFERENCE: UMIC:047USQ/10103482
CURRENT APPLICATION NUMBER: US/09/860,738C
CURRENT FILING DATE: 2001-05-18
NUMBER: Patentin version 3.1
SOFTWARE: Patentin version 3.1
SEQ ID NO 50
LENGTH: 23
TYPE: DNA
ORGANICM
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; Sequence 53, Application US/09860738C; Publication No. US20030040620A1
; GENERAL INFORMATION:
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                                                                                                                                       APPLICANT: Langmore, John
APPLICANT: Makarov, Vladimir
APPLICANT: Makarov, Vladimir
TITLE OF INVENTION: Method of Producing a DNA Library Using Positional Amplification
FILE REFERENCE: UMIC:047US0/10103482
CURRENT APPLICATION NUMBER: US/09/860,738C
CURRENT FILING DATE: 2001-05-18
NUMBER OF SEQ ID NOS: 121
SOFTWARE: PatentIn version 3.1
SEQ ID NO 53
LENGTH: 23
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Best Local Similarity
Matches 17; Conserv
                                            Query Match
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SOFTWARE: PatentIn version 3.1
SEQ ID NO 48
LENGTH: 23
                                                                                                          TYPE: DNA
ORGANISM: Unknown
                                                                                     OTHER INFORMATION: Primer
                                                                                                FEATURE:
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Pred. No. 1.
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Pred. No. 1.3e+03;
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US-10-198-069-45/c
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US-09-860-738C-55
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Best Local
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           TITLE OF INVENTION: PEPTIDES EFFECTIVE IN THE TREATMENT OF TUMORS AND OTHER
                            APPLICANT: AVERBACK,
                                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: Unknown
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 23
TYPE: DNA
ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                        LENGTH: 23
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17; Conserv
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; OTHER INFORMATION: Primer US-09-860-738C-74
Sequence 45, Application US/10198069 Publication No. US20030096756A1 GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 55, Application US/09860738C Publication No. US20030040620A1
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APPLICANT: Makarov, Vladimir
TITLE OF INVENTION: Method of Producing a DNA Library Using Positional Amplificati
FILE REFERENCE: UMIC:047US0/10103482
CURRENT APPLICATION NUMBER: US/09/860,738C
CURRENT FILING DATE: 2001-05-18
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SOFTWARE: PatentIn version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/860,738C CURRENT FILING DATE: 2001-05-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Langmore, John
APPLICANT: Makarov, Vladimir
TITLE OF INVENTION: Method of Producing a DNA Library Using Positional Amplificati
FILE REFERENCE: UMIC:047US0/10103482
                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 GGTGCATGTGTATCGTCCGAG
                                                                                                                       GGTGCATGTCTTTGGTCCCAG
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81.0%;
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81.0%;
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                                                                                                                                                                                                            Score 14.6;
Pred. No. 1
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Pred. No. 1
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PRIOR APPLICATION NUMBER: 60/306,161
PRIOR FILING DATE: 2001-07-19
PRIOR PPLICATION NUMBER: 60/306,150
PRIOR FILING DATE: 2001-07-19
PRIOR APPLICATION NUMBER: 60/331,477
PRIOR FILING DATE: 2001-11-16
NUMBER OF SEQ ID NOS: 48
SOFTMARE: PATEENTIN Ver. 2.1
SEQ ID NO 45
TYPED: NOW 39
TYPED: NOW 39
                                                                             DЬ
                                                                                                                                                                                                                               ; TYPE: DNA |
; OFANISM: Unknown;
; FEATURE:
; OTHER INFORMATION: Primer
US-09-860-738C-36
                                                                                                               Qγ
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Search completed: June 22, 2003, 03:18:16 Job time: 78.7812 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; OTHER INFORMATION: Description of Artificial Sequence: Synthetic ; OTHER INFORMATION: oligonucleotide US-10-198-069-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 15
                                                                                                                                          Query Match 50.2
Best Local Similarity 81.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                          APPLICANT: Langmore, John
APPLICANT: Makarov, Vladimir
APPLICANT: Makarov, Vladimir
TITLE OF INVENTION: Method of Producing a DNA Library Using Positional Amplification
FILE REFERENCE: UMIC:047US0/10103482
CURRENT APPLICATION NUMBER: US/09/860,738C
CURRENT FILING DATE: 2001-05-18
NUMBER OF SEQ ID NOS: 121
SOFTWARE: Patentin version 3.1
SEQ ID NO 36
LENGTH: 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 36, Application US/09860738C Publication No. US20030040620A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 56.3
Best Local Similarity 81.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/10/198,069
CURRENT FILING DATE: 2002-07-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: CONDITIONS REQUIRING THE REMOVAL OR DESTRUCTION OF TITLE OF INVENTION: CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE: 59003.000009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               40 GGTGCATGTGTATCGTCCGAG 20
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81.0%;
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Pred. No. 1.
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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Total number of hits satisfying chosen parameters:
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Perfect score:
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Gapop 10.0 , Gapext 1.0
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26
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gb_est1:*
gb_est2:*
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gb_est4:*
gb_est5:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

| O                  |                   |                   | c                 | C                 | C                 | Result                   |
|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------------|
| 6                  | 5                 | 4                 | w                 | 2                 | 1                 | esult<br>No.             |
| 16.6               | 16.8              | 17                | 18                | 18                | 19.2              | Score                    |
| 63.8               | 64.6              | 65.4              | 69.2              | 69.2              | 73.8              | Query  Match Length DB I |
| 34                 | ω<br>ω            | 48                | 45                | 40                | 42                | Length DB ID             |
| 17                 | 14                | 14                | 14                | 14                | 14                | B                        |
| AZ393855           | н85333            | N79917            | T92229            | N95034            | H47110            | ID                       |
| AZ393855 1M0157D07 | H85333 ys90e04.rl | N79917 yz86a06.rl | T92229 ye17f11.r1 | N95034 zb32b05.s1 | H47110 yp77e03.s1 | Description              |

| 4                  | C: 44         |              |               |                |              |              |                | ი<br>ა       |          |         |             |         | с<br>3   |         |        | 2        | ი<br>2 | N                  | c<br>2 |                    | 2        | c 2      | 2      | c 2      | •                 |         | c 1      |                   | c<br>1   |              | _       | 1             |       |           |         | വ               |                  |          |
|--------------------|---------------|--------------|---------------|----------------|--------------|--------------|----------------|--------------|----------|---------|-------------|---------|----------|---------|--------|----------|--------|--------------------|--------|--------------------|----------|----------|--------|----------|-------------------|---------|----------|-------------------|----------|--------------|---------|---------------|-------|-----------|---------|-----------------|------------------|----------|
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| 13                 |               | ω            | w             | ω.             | ω            | w            | į.             | ω<br>·       | ω<br>·   | ω       | ω           | ω.      | ω        | ω       | Ü      | ω        | ω      | ω                  | 14     | 14                 | 4.2      | 4        | 4.     | ٠        | 4                 | 15      |          |                   | 15       | 15           | 15      | Ġ             | Ġ     | Ġ         | Ġ       | 6               | 5                | 6        |
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| 24                 | 50            | 36           | ω<br>ω        | 3              | 50           | 50           | 50             | 38           | 32       | 31      | 28          | 47      | 43       | 42      | 28     | 49       | 47     | 25                 | 50     | 24                 | 50       | 50       | 31     | 50       | 34                | 46      | 43       | 43                | 42       | 41           | 38      | ω<br><b>3</b> | 28    | 28        | 24      | 32              | 32               | 48       |
| 17                 | 9             | 14           | <u>1</u> 3    | ü              | 14           | 9            | 9              | 13           | 14       | 17      | 17          | 14      | 14       | 14      |        |          | 17     | 17                 | 14     | 17                 |          |          |        |          | 14                | 17      | 14       | 14                | 9        | 17           | 17      | 14            | 14    | 14        | 17      | 14              | 14               | 17       |
| TA57D02P           | 23            | 46           | 4             | 39279          | 670          | 8            | 023            | <b>I1125</b> | 98       | 59      | A2361627    | 44      | 954      | 474     | 016    | 5813     | L754   | Z63594             | 3      | 29                 | 0986     | 252      | 935    | 0238     | 545               |         | 21       | 9843              | 868654   | 2489         | 43833   | 6704          | 9418  | 040       | Z831    | T92862          | 92842            | AZ496155 |
| AL456799 T. brucei | 2384 AU102384 | 5 yg28a09.s1 | 94082 50072-2 | 92790 50071-2- | )5 yx61b10.s | 2386 AU10238 | 102375 AU10237 | 602900       | 019b04.r | 1M05370 | 1M0106H     | 79d08.r | :89e04.s | :68h09. | 01h11. | 7946a07. | Arabio | AZ635949 1M0493C08 | .42c06 | AZ822910 2M0096N02 | 2M0074K0 | \U102523 | 1M0156 | \U102380 | N63645 zal6f12.s1 | 1M0285F | 106e10.r | H09843 ym01d05.rl | k49f09.s | 1M0322L1     | 1M0228E | 150e12.s      | 29h12 | e16c02.'r | 2M0110G | 92862 ye27e08.r | 92842 ye27a08.r1 |          |

# ALIGNMENTS

|  | JOURNAL<br>COMMENT                    | TITLE  | AUTHORS  | REFERENCE         |   | ORGANISM     | SOURCE | KEYWORDS | VERSION            | ACCESSION |   | DEFINITION            | LOCUS                                    | RESULT 1<br>H47110/c |
|--|---------------------------------------|--|--|-------------------|---|--------------|--------|----------|--------------------|-----------|---|-----------------------|--|----------------------|
| Washington University School of Medicine 4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108 Tel: 314 286 1800 Fax: 314 286 1810 Email: estéwatson.wustl.edu Insert Size: 704 High quality sequence starts: 1 High quality sequence stops: 1 | Unpublished (1995) Contact: Wilson RK | Rifkin, L., Rohling, T., Soares, M., Tan, F., Trevaskis, E., Waterston, R., Williamson, A., Wohldmann, P. and Wilson, R. The Washu-Merck EST Project | Hillier, L., Clark, N., Dubuque, T., Elliston, K., Hawkins, M., Holman | 1 (bases 1 to 42) | Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia: Eutheria; Primates: Catarrhini; Hominidae: Homo | Homo sapiens | human. | EST.     | H47110.1 GI:923162 | H47110    | IMAGE:193468 3' similar to gb:213009_rna1 EPITHELIAL-CADHERIN | oleen 1NFLS Homo sapi | H47110 42 bp mRNA linear EST 16-AUG-1995 |                      |

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RESULT 2
N95034/c
                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
SOURCE
                                                                                                                                                                                                                        COMMENT
                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                       REFERENCE
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Best Local
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                                   source
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 40
                                                                                      Email: estewatson.wustl.edu
Email: estewatson.wustl.edu
This_clone is available royalty-free through LLNL; contact the
                                                                                                                                                                                                                                             l (bases 1 to 40)
Hillier,L., Clark,N., Dubuque,T., Elliston,K., Hawkins,M., Holman,M., Hultman,M., Kucaba,T., Le,M., Lennon,G., Marra,M., Parsons,J., Rifkin,L., Rohlfing,T., Soares,M., Tan,F., Trevaskis,E., Waterston,R., Williamson,A., Wohldmann,P. and Wilson,R.
The WashU-Merck,EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                          EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            N9503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Zb32D05.s1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:305265 3' similar to 951M87890|HUMALCE124 Human carcinoma cell-derived Alu RNA transcript, (rRNA); gb:M91159 !!!! ALU CLASS E WARNING ENTRY !!!! (HUMAN);, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 TGGTGCATGTCTTTGGTCCCAGCTAC 26
                                                                                                                                                  Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IMAGE Consortium (info@image.llnl.gov) for further information. Trace considered overall poor quality
Insert Length: 704 Std Error: 0.00
                                                                                                                                                                                  Washington University School of Medicine
                                                                                                                                                                                                                                     Unpublished (1995)
                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae
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Location/Qualifiers
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                                                                                  primer: ETPrimer
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                                               quality sequence stop: 1.
Location/Qualifiers
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/organism="Homo sapiens"
/db_xref="GDB:1248675"
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/db_xref="GDB:3762489"
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                                   . 40
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Pred. No. 3
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9 g 8 t 2 others
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RESULT 3
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                                                                                                                                              This clone is available royalty-free through LLNL; IMAGE Consortium (info@image.llnl.gov) for further Trace considered overall poor quality
                                                                                                                                                                                                                                                   High quality sequence starts: 1
                                                                                                                                                                                                                                                                                                                                Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                            Washington University School of Medicine 4444 Forest Park Parkway, Box 8501, St I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Schellenberg, K., Soares, M.B., Tan, F., Thierry-Meg, J., Trevas Underwood, K., Wohldmann, P., Waterston, R., Wilson, R. and Marr Generation and analysis of £80,000 human expressed sequence Genome Res. 6 (9), 807-828 (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 45)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    T92229
45 bp mRNA linear EST 22-MAR-199
yel7fll.rl Stratagene lung (#937210) Homo sapiens cDNA clone
IMAGE:118029 5' similar to gb:M81181 SODIUM/POTASSIUM-TRANSPORTING
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Location/Qualifiers
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/organism="Homo sapiens"
/db_xref="GDB:486318"
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/dev_stage="adult"
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48 bp mRNA linear EST 02-APR-1996
yz86a06.rl Soares_multiple_sclerosis_2NbHMSP Homo sapiens cDNA
clone IMAGE:289906 5' similar to gb|M87911|HUMALNE57 Human
carcinoma cell-derived Alu RNA transcript, (rRNA); gb:X54150_rna1
IMMUNOCLOBULIN ALPHA FC RECEPTOR PRECURSOR (HUMAN); contains element
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       Trace considered overall poor quality
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Email: est@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unpublished (1995)
Contact: Wilson RK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ,R., Williamson,A., Wohldman
The WashU-Merck EST Project
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Fax: 314 286 1810
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                                                              /tissue_type="multiple sclerosis lesions"
/dev_stage="Age 46"
/lab_host="hl0B (ampicillin resistant)"
/note="Vector: pT773D (Pharmacia) with a modified polylinker v_TYPE: phagemid; Site_1: Not I; Site_2: EC; 1st strand cDNA was primed with a Not I - oligo(dT)
double-stranded cDNA was size selected, ligated to Eco
                                                                                                                                                                                                                                                                 /db_xref="taxon:9606"
/clone="IMAGE:289906"
                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
/db_xref="GDB:3905746"
                        /sex="male"
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Pred. No. 1.2e+03
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                                                                                                                                                                                                                                                                                                                                                                                      High quarry Source: IMAGE Consortium, LLNL Source: IMAGE Consortium, LLNL First through LLNL; contact with clone is available royalty-free through LLNL; contact with IMAGE Consortium (info@image.llnl.gov) for further information; IMAGE considered overall poor quality
Trace considered overall poor quality
Tracert Length: 2596 Std Error: 0.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15 TGGTGTGCCTGTGATNCCAGCTAC 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 33)
Hillier,L., Clark,N., Dubuque,T., Elliston,K., Hawkins,M., Holma,M., Kucaba,T., Le,M., Lennon,G., Marra,M., Parsons,R., Rifkin,L., Rohlfing,T., Soares,M., Tan,F., Trevaskis,E., Waterst,R., Williamson,A., Wohldmann,P. and Wilson,R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 TGGTGCATGTCTTTGGTCCCAGCTAC 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                High quality sequence starts: High quality sequence stops: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tel: 314 286 1800 Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Washington University School of Medicine 4444 Forest Park Parkway, Box 8501, St. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unpublished (1995)
Contact: Wilson RK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 );, mk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ys90e04.rl Soares retina Ni
IMAGE:222078 5' similar to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Email: est@watson.wustl.edu
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Location/Qualifiers
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a 7 c 18 g 15 t 1 others
double-stranded cDNA was size selected, ligated to Eco RI adapters (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of a modified pT7T3 vector
                                                        the Not I and Eco RI sites of a modified pT7T3 vector (Pharmacia). Library went through one round of normalization to a Cot = 5. Library constructed by Bento Soares and M.Fatima Bonaldo. RNA from 4 multiple sclerosi
                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/db_xref="GDB:3850839"
/db_xref="taxon:9606"
/clone="IMAGE:222078"
                                                                                                                                                                 /tissue_type="retina"
/dev_stage="55 year o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               adapters (Pharmacia), digested with Not I and cloned into
                                                                                                                                                /dev_stage="55 year old"
/lab_host="DH10B (ampicillin resistant)"
                                                                                                                                                                                                                                 /clone_lib="Soares retina
                                                                                                                                                                                                                  /sex="male"
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76.9%;
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gb:Y00281 RIBOPHORIN I PRECURSOR (HUMAN
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3.1e+03;
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The retinas were obtained from a 55

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AZ393855/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           High
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Erro
Plate: 0157 row: D column: 07
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tel: 801 585 5606
Fax: 801 585 7177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unpublished (2000)
Contact: Robert B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus 1 (bases 1 to 34)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GSS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AZ393855 34 bp DNA linear 1M0157D07F Mouse 10kb plasmid UUGC1M library Musclone UUGC1M0157D07 F, DNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Class: plasmid ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Seq primer: CGTTGTAAAACGACGGCCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rn.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               University of Utah Genome Center University of Utah
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mouse whole genome scaffolding with paired end reads from 10kb
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adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWD42 (gl14732114|gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated
                                                                                                                (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The
                                                                                                                                                                                                                                                                             /note="Vector: PWD42nv; Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Biomedical
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                                                                                                                                                                                                                                                                                                                                                                                       /organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="UUGC1M0157D07"
                                                                                                                                                                                                                                                      Laboratory Mouse DNA Resource
                                                                                                                                                                                                                                                                                                                                                                /clone_lib="Mouse 10kb plasmid UUGC1M library"
                                                                                                                                                                                                                                                                                                /lab_host="E. Coli strain XL10-Gold, T1-resistant, F-"
/note="Vector: PWD42nv; Purified genomic DNA from M.
                                                                                                                                                                                                                                                                                                                                                /sex="Male"
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85.7%;
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S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error:
Plate: 0332 row: K column: 15
Seq primer: CGTTGTAAAACGACGGCCAGT
Class: plasmid ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Robert B. Weiss
University of Utah Genome
University of Utah
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19; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tel: 801 585 5606
Fax: 801 585 7177
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mouse whole genome
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Islam,H., Longacre,S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1M0332K15F Mouse 10kb plasmid UUGC1M library Mus musculus genomic clone UUGC1M0332K15 F, DNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to adaptored vector DNA, and transformed into chemically-competent E. coli XLIO-Gold (Stratagene) cells and selected for ampicillin resistance."
10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pND42 (gil473z141 gblaf12907z.1), a copy-number inducible derivative of plasmid R1. The vector was ligated
                                                                                       was blunt end-repaired with T4 DNA polymerase and T4 polynucleotides kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptored DNA was purified and size-selected for a 9.5 to
                                                                                                                                                                                                                                                                /lab_host="E. Coli strain XL10-Gold, T1-resistant, F /note="Vector: PWD42nv; Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jack
                                                                                                                                                                            (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through 0.005 inch orifice at constant velocity. The sheared DNA
                                                                                                                                                                                                                                                Laboratory Mouse DNA Resource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Biomedical Polymers Research Bldg.,
                                                                                                                                                                                                                                                                                                                                                                                   /db_xref="taxon:10090"
/clone="UUGC1M0332K15"
                                                                                                                                                                                                                                                                                                                                                          /clone_lib="Mouse 10kb plasmid UUGC1M library"
                                                                                                                                                                                                                                                                                                                                          /sex="Male"
                                                                                                                                                                                                                                                                                                                                                                                                                                 /strain="C57BL/6J"
                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Mus musculus
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Pred. No. 4.3e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hillier, L., Lennon, G., Becker, M., Bonaldo, M.F., Chiapelli, B., Chissoe, S., Dietrich, N., DuBuque, T., Favello, A., Gish, W., Hawkins M., Hultman, M., Kucaba, T., Lacy, M., Le, M., Le, N., Mardis, E., Moore, B., Morris, M., Parsons, J., Prange, C., Rifkin, L., Rohlfing, T., Schellenberg, K., Soares, M.B., Tan, F., Thierry Meg, J., Trevaskis, E., Underwood, K., Wohldmann, P., Waterston, R., Wilson, R. and Marra, M. Generation and analysis of 280,000 human expressed sequence tags Genome Res. 6 (9), 807-828 (1996)
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                                                                                                                                                                                                                                                                                                                                                                                                                                            High quality sequence starts: 1 High quality sequence stops: 1 Source: IMAGE Consortium, LLNL This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov)
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Ye27a08.rl Stratagene lung (#937210) Homo IMAGE:118934 5' similar to gb:213009_rnal
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                                                                                                                                                                                                                                                                                                                                                                                                                                  for further information.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Email: est@watson.wustl.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Washington University
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: Wilson RK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97044478
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Insert Size: 451
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Location/Qualifiers
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                                                      with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to adaptored vector DNA, and transformed into chemically-competent E. coli XLIO-Gold (Stratagene) cells and selected for ampicillin resistance: "
                                                                                                                                                                                                                                                        /db_xref="taxon:9606"
/clone="IMAGE:118934"
                                                                                                                                                                         /dev_stage="72 years"
/lab_host="SOLR cells (kanamycin resistant)"
                                                                                                                                                                                                                                  /clone_lib="Stratagene lung (#937210)"
                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
/db_xref="GDB:487223"
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                                                                                                                                                                                                                /sex="male"
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16.2;
  DB
  14;
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EPITHELIAL-CADHERIN
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RESULT 9
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                                                                    18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Email: est@watson.wustl.edu
Insert Size: 565
High quality sequence starts: 1 High quality sequence stops: 1.
Source: IMAGE Consortium, LLNL This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov)
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97044478
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                                                                                      Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                for further information.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 [nsert Length: 565
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CATGCCTATGGTCCTAGCTAC
                                 CATGTCTTTGGTCCCAGCTAC 26
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                                                                                                                                                           9
                                                                                                                                          /organism="Homo sapiens"
/db_xref="GDB:487271"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GI:724775
                                                                                                                                                                                                                                                                                                       /sex="male"
                                                                                                                                                                                                                                                                                                                  /clone_lib="Stratagene lung (#937210)"
                                                                                                                                                                                                                                                                                                                                        /clone="IMAGE:118982"
                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                     62.3%;
85.7%;
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                                                                                     Score 16.2; DB 14
Pred. No. 6.2e+03;
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sapiens cDNA clone
EPITHELIAL-CADHERIN
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RESULT 10

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BASE COUNT
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LÓCUS
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2M0110G21R Mouse 10kb plasmid UUGC1M Library Mus musculus genomic
clone UUGC2M0110G21 R, DNA sequence.
                                                                                                                                   18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    High quality sequence stop: 24.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tel: 801 585 5606 Fax: 801 585 7177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    University of Utah Genome Center
University of Utah
Rm. 308, Biomedical Polymers Res
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Contact: Robert B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 plasmid inserts
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mouse whole genome scaffolding with paired end reads from 10kb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    and Wright, D., Weiss, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mus musculus
                                                                                                                                                 Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von Niederhausern,A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       house mouse.
                                                                             TGGTGCATGTCTTTGGTCCCAG 22
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                                                                                                                                   Conservative
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Length: 10000 Std Error:
0110 row: G column: 21
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                                                                                                                                                                                                                                                                                            was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pND42 (g114732114)gbjAF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to adaptored with a daptored mouse DNA was annealed to
                                                                                                                                                                                                                      (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through 0.005 inch orifice at constant velocity. The sheared DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /lab_host="E. Coli strain XL10-Gold, T1-resistant, F-" /note="Vector: PWD42nv; Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Biomedical Polymers, Research Bldg.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Laboratory Mouse DNA Resource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Mus musculus
/strain="C57BL/6J"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /clone_lib="Mouse 10kb plasmid UUGC1M library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /db_xref="taxon:10090"
/clone="UUGC2M0110G21"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /sex="Male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ocation/Qualifiers
                                                                                                                                                 60.0%;
81.8%;
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                                                                                                                             Score 15.6; I
Pred. No. 1e+C
0; Mismatches
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                                                                                                                                                 1e+04;
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                                                                                                                                                                  DB 17;
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Query Match
Best Local Similarity
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                   ye29h12.rl Stratagene lung
IMAGE:119207 5' similar to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Email: est@watson.wustl.edu
Insert Size: 320
High quality sequence starts: 1 High quality sequence stops: 1
Source: IMAGE Consortium, LLNL This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information. Trace considered overall poor quality
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Genome Res. 6 (9), 807-828 (1996) 97044478
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28 bp mRNA linear EST 20-MAR:
yel6c02.rl Stratagene lung (#937210) Homo sapiens cDNA clone
JMAGE:117890 5', Similar to gb:M73700 LACTOTRANSFERRIN PRECURSOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tel: 314 286 1800
Fax: 314 286 1810
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(HUMAN);, mRNA sequence
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Seg_primer: M13RP1
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                                                                                                                                                                                      (bases 1 to 28)
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/clone="IMAGE:117890"
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/db_xref="GDB:486179"
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85.0%;
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                                                                                                                                                                                                                                                                                                        Score 15.2;
pred. No. 1
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                   28 bp mRNA linear EST 24-MAR-1995

y (#937210) Homo sapiens cDNA clone

y gb:M73700 LACTOTRANSFERRIN PRECURSOR
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                                                                                                                                                                                                                                                                                                                           13
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                                                                                                                                                                                                                                                                                                                                                                               28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Insert Size: 348
Insert Size: 348
High quality sequence starts: 1 High quality sequence stops: 1
Source: IMAGE Consortium, LLML This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information. Trace considered overall poor quality Insert Length: 348 Std Error: 0.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hillier, L., Lennon, G., Becker, M., Bonaldo, M.F., 'Chiapelli, B., Chissoe, S., Dietrich, N., DuBuque, T., Favello, A., Gish, W., Hawkins, M., Hultman, M., Kucaba, T., Lacy, M., Le, M., Le, N., Mardis, E., Moore, B., Mooris, M., Parsons, J., Prange, C., Rifkin, L., Rohlfing, T., Schellenberg, K., Soares, M.B., Tan, F., Therry Meg, J., Trevaskis, E., Underwood, K., Wohldmann, P., Waterston, R., Wilson, R. and Marra, M. Generation and analysis of 280,000 human expressed sequence tags Genome Res. 6 (9), 807-828 (1996)
.M., Hultman,M., Kucaba,T., Le,M., Lennon,G., Marra,M., Parsons, Rifkin,L., Rohifing,T., Soares,M., Tan,F., Trevaskis,E., Waterst,R., Williamson,A., Wohldmann,P. and Wilson,R.
The WashU-Merck EST Project
                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 33)

Hillier, L., Clark, N., Dubuque, T., Elliston, K., Hawkins, M., Holman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Washington University School of Medicine 4444 Forest Park Parkway, Box 8501, St. I
                                                                                                                                             Homo sapiens
                                                                                                                                                                                 EST
                                                                                                                                                                                                                                                  za50e12.s1 Soares fetal liver spleen 1NFLS Homo sapiens IMAGE:296014 3' similar to gb:X02067 H.sapiens mRNA for
                                                                                                                                                                                                                                                                                        N67043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 High quality sequence stop: 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Email: est@watson.wustl.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Contact: Wilson RK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97044478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mammalia; Eutheria; Primates;
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                                                                                                                                                                                                                              pseudogene (HUMAN);, mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/db_xref="GDB:487496"
/db_xref="taxon:9606"
/clone="IMAGE:119207"
                                                                                                                                                                                                  GI:1219168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /dev_stage="72 years"
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85.0%;
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Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .6e+04;
                                                                                                                                                                                                                                                                                        mRNA
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7SL RNA
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VERSION
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AZ438336
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COMMENT
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Best Local Similarity
                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                      AUTHORS
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AZ438336.1
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                                                                                     84112,
                                                                                                                     Contact: Robert B.
University of Utah
University of Utah
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Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unpublished (1995)
Contact: Wilson RK
                                                Tel: 801 585 5606
Fax: 801 585 7177
                                                                                                                                                                             Unpublished (2000)
                                                                                                                                                                                                                                                                                                                                                         Mus musculus
             Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error:
                                                                                                                                                                                            plasmid inserts
                                                                                                                                                                                                                 Mouse whole genome
                                                                                                                                                                                                                              and Wright, D., Weiss, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        High quality sequence stop: 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Email: est@watson.wustl.edu
                                                                                                                                                                                                                                                                                                                                                                              house mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGTGCCTGTNGTCCCAGCTAC 21
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                                                                                                    Biomedical
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/clone="IMAGE:296014"
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81.0%;
                                                                                                                                          Genome Center
                                                                                                                                                            Weiss
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Dunn,D., Aoyagi,A., Barbér,M., Beacorn,T., Di
Islam,H., Longacre,S., Mahmoud,M., Meenen,E.,
M., Rose,M., Rose,R., Stokes,R., Tingey,A.,
                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus 1 (bases 1 to 38)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AZ438336 38 bp DN 1M0228E19F Mouse 10kb plasmid UUGC1M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information. Trace considered overall poor quality
Seq primer: ml3 -40 forward
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Washington University School of Medicine 44444 Forest Park Parkway, Box 8501, St. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           clone UUGC1M0228E19 F, DNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Pac I and cloned into the Pac and Eco RI sites of the modified pT73 vector. Library went through one round of normalization. Library constructed by Bento Soares and M.Fatima Bonaldo."

1 9 c 11 9 7 t 1 others
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/db_xref="GDB:1240935"
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                                                                                                                                                                                                                                     scaffolding with paired
                                                                                                        Polymers Research Bldg.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 15.2; DB 14
Pred. No. 1.6e+04;
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M., Meenen,E., Pedersen,T., Reilly
0.00
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Best Local S
Matches 18
                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AZ489704 41 bp DNA ILLEGI WSS V VIL ZV. 1M0322L14F Mouse 10kb plasmid UUGCIM library Mus musculus genomic clone UUGCIM0322L14 F, DNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Seg primer: CGTTGTAAAACGACGGCCAGT Class: plasmid ends
Tel: 801 585 5606
Fax: 801 585 7177
                                                                                                                                                Rn.
                                                                                                                                                            Contact: Robert B. Weiss
University of Utah Genome Center
University of Utah
                                                                                                                                                                                                                                                                                                          Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C., Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von Niederhausern,A. and Wright,D.,Weiss,R.
                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
1 (bases 1 to 41)
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AZ489704.1 GI:10659714
                                                                                                                                                                                                                                                                plasmid inserts
                                                                                                                                                                                                                                                                               Mouse whole genome scaffolding with paired end reads from 10kb
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                                                                                                                                                                                                                                      Unpublished (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    nouse mouse.
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                                                                                                                                      308, Biomedical Polymers Research Bldg.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWD42 (9114732114 [95]AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to adaptored vector DNA, and transformed into chemically-competent E. coli xL10-Gold (Stratagene) cells and selected for ampicillin resistance."
                                                                                                                     USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         musculus C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Mus musculus
/strain="C57BL/6J"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       'note="Vector: PWD42nv; Purified genomic DNA from M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /lab_host="E. Coli strain XL10-Gold, T1-resistant, F-"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /clone_lib="Mouse 10kb plasmid UUGC1M library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /clone="UUGC1M0228E19"
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78.3%;
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Pred. No. 2.1e+04;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
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Search completed: June 21,
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                                                                                                                                                                                                                                                                                                                     adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWD42 (gil4732114|gb|AF129072.1), a copy-number inducible derivative of plasmid Rl. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to adaptored vector DNA, and transformed into chemically-competent E. coli xL10-Gold (Stratagene) cells and selected for ampicillin resistance."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptored DNA was purified and size-selected for a 9.5 to
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /db_xref="taxon:10090"
/clone="UUGC1M0322L14"
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/strain="C57BL/6J"
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78.3%;
2003, 23:58:52
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Pred. No. 2.1e+04;
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score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## RESULT 1 AX378746/C LOCUS DEFINITION ACCESSION VERSION Result No. 00000 O 0 0 0 0 C o 000 000 a $\begin{array}{c} 114 \\ 155 \\ 167 \\$ Score 15 15 15 16 16 16 16 16 16 Match Query 535 from Patent W00206525 ngth DΒ 149720 AX022217 AX030743 BD008658 AX230591 AX268229 AX268242 A93509 A93513 A93513 A93511 AR103647 AR103647 AX190637 AX29031 AX283139 AX425140 AX425148 AB069002 AX268952 AX249031 AX425081 AX114375 AX021753 AX025434 AX378746 AX183954 A84718 A34769 A34738 A34747 IJ AX192292 AX441224 AX077406 E50643 AX219952 AX040099 AR110630 AR029059 AR02521 AX322206 AX183780 ALIGNMENTS SUMMARIES 47 bp DNA linear AX077406 Sequence AX4769 Synthetic e A34738 Eglin sequence A34747 Modified Eg AX249031 Sequence AX114375 Sequence AX322206 Sequence AX322206 Sequence AX3268229 Sequence AX268229 Sequence AX268242 Sequence AX368242 Sequence AX368241 Sequence AX368243 Sequence AX190637 Sequence AX190637 Sequence AX26931 Sequence AX26931 Sequence AX26931 Sequence AX6934 Sequence AX030743 Sequence BD000858 Stable ex AX192292 Sequence AB069002 Synthetic AX268952 Sequence AX441224 Sequence AR025212 Sequence AX220037 AX425140 AX425148 AR029059 AR110630 AX040099 AX219952 AX183954 A84718 Se A84718 Sequence 11 AX114379 Sequence AX021753 Sequence AX025434 Sequence AX446233 AX378746 Sequence Description PAT Simple dete Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence

AX378746/C
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Sequence 535 from Patent WO0206525.
ACCESSION
AX378746
VERSION
KEYWORDS
SOURCE
ORGANISM
Homo sapiens
Eukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
REFERENCE
AUTHORS
TITLE
TOthen, D., Blumenfeld, M., Chumakov, I., Abderrahim, H. and Bihain, B.
TOURNAL
Patent: WO 0206525-A 535 24-JAN-2002;

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A84718
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Farinelli, L. and Mayer, P.
Farinelli, L. and Mayer, P.
METHOD OF NUCLEIC ACID SEQUENCING
Patent: WO 9844152-A 11 08-CCT-1998;
FARINELLI LAURENT (CH); MAYER PASCAL
                                                                                                                                                                                                                                                                                                                                                                                                                        Ibd-related polymorphisms
Patent: WO 0142511-A 1707 14-JUN-2001;
WHITEHEAD INSTITUTE FOR BIOMEDICAL RES
Biotherapeutics Corporation (CA)
Location/Qualifiers
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Daly, M., Hudson, T. J., Lander, E.S., Rioux, J. and Siminovitch, K.
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11 from Patent WO9844152
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                      /organism="unidentified"
/db_xref="taxon:32644"
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Schork, N. and Skierczynski, B.
Methods of genetic cluster analysis and
Patent: WO 0129257-A 48 26-APR-2001;
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48 from Patent·W00129257
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Pred. No. 5.3e
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Pred. No. 5
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1 (bases 1 to 25)

Mizugaki,M. and Hiratsuka,M.

LITLE

Simple detection method of drug-metabolizing synt.

OTSUKA PHARMACEUT CO LTD

OS Unidentified
PN JP 2001017185-A 7 23-JAN-2001;

COMMENT OS Unidentified
PN JP 201017185-A/7
PD 23-JAN-2001
PF 10-DEC-1999 JP 19935161^
PR

MICHINAO MIZUGAKT
CC
FH Key
FT SC
FT
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
/organism='Unidentified'
Location/Qualifiers
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AX025434/c
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1 (bases 1 to 29)

Howell, S., Ledeboer, A.M., Frenken, L.G. and van der Logt, C.P.E.

Multivalent antigen-binding proteins

Patent: WO 9923221-A 84 14-MAY-1999;

HOWELL STEVEN (GB); UNILEVER PLC (GB); LEDEBOER ADRIANUS MARINUS

(NL); LOGT CORNELIS PAUL ERIK V D (NL); UNILEVER NV (NL); FRENKEN
                                                                                                                                                                                                                 Sequence 37 from Patent EP1002861. AX025434
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Sequence 84 from Patent W09923221.
AX021753
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/db_xref="taxon:32630"
/note="LINKER" 8 9 8 t
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/db_xref="taxon:32644"
7 c 6 g
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/db_xref="taxon:32630"
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Sequence
AX183780
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1 (bases 1 to 39)
Gill, P.T., Hussain, J.T. and Long, A.T.
                                                                                                                                                                                                                                                                                                                                                                          synthetic construct.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Daly,M., Hudson,T.J., Lander,E.S., Rioux,J. and Siminovitch. Ibd-related polymorphisms Patent: WO 0142511-A 1533 14-JUN-2001; WHITEHEAD INSTITUTE FOR BIOMEDICAL RESEARCH (US); Ellipsis Biotherapeutics Corporation (CA)
A34769
Synthetic eglin
                                                                                                    5 ACCTGGCGAACATGGTGAACCCCATC 30
                                                                                                                               20;
                                                                                                                                                                                                                                                                                   Improvements in and relating to analysis of Patent: WO 0107640-A 19 01-FEB-2001;
The Secretary of State for the Home Department Location/Qualifiers
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1533 from Patent W00142511.
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/db_xref="taxon:32630"
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/db_xref="taxon:9606"
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Modified Eglin C sequence.
A34747
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Process for the preparation of protease inhibitors
Patent: EP 0146785-A 03-JUL-1985;
Patent: EP 0146785-A 03-JUL-1985;
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A34769.1
                                                    unidentified unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Process for the preparation of protease inhibitors Patent: EP 0146785-A 43 03-JUL-1985; CIBA-GEIGY AG; PLANTORGAN WERK Heinrich G.E. Chris
  Fritz,H.,
   Rink, H., Liersch, M., Fritz, H., Maerki, W.
                                                                                                                                                                                                                                        19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eglin sequence
A34738
                                                                                        A34747.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  unidentified
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     artificial sequences.
1 (bases 1 to 41)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              synthetic construct
                                       unclassified
                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                      unclassified
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                            (bases 1 to 34)
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9 c 7 g
                                                                                                                                                                                                                                                                                                                         /organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                        GI:21694241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GI:21694261
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79.2%;
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72.4%;
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              Sieber, P.,
                                                                                                                                                                                                                                                 Score 16;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 16.2; DB 6;
Pred. No. 1.9e+04;
0; Mismatches 8
  Alkan
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              Rittel, W.,
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..3e+04;
5;
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                                                                                                                                                                                                                                                            Length 34;
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                                                                                                                                                                                                                                                                                                                                                                                                           Meyer,F.,
               Meyer, F.,
                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Meyer, F.,
                                                                                                                            linear
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                                                                                                                          PAT
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              Seemueller, U.
                                                                                                                                                                                                                                                                                                                                                                                                             Seemueller, U.
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ORGANISM
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ORIGIN
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AX425081/c
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Source
                                                             FEATURES
                                                                                                                                     REFERENCE
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                                                                                                                                                                                                             ACCESSION
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
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Best Local :
                                                                                     JOURNAL
                                                                                                  TITLE
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                                                                                                                                                                                                                                                                                                                                                Matches
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                                                                                                                                                                                               Sequence 34
AX425081
AX425081.1
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AX249031
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19;
                                                          Method and reagent for the inhibition of erg Patent: WO 0188124-A 3417 22-NOV-2001; RIBOZYME PHARMACEUTICALS, INC. (US); GLAXO Location/Qualifiers
                                                                                                                                                             synthetic construct synthetic construct
                                                                                                                                                                                                                                                                                                                                                17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human single nucleotide polymorphisms
Patent: WO 0166800-A 1110 13-SEP-2001;
WHITEHEAD INSTITUTE FOR BIOMEDICAL RESEARCH
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Process for the preparation of protease inhibitors Patent: EP 0146785-A 21 03-JUL-1985; CIBA-GEIGY AG; PLANTORGAN WERK Heinrich G.E. Chris
                                                                                                                        Jarvis,T., von Carlowitz,I., Mcswiggen,J.A.,
                                                                                                                                                 artificial
                                                                                                                                                                                                                                   AX425081
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                                                                                                                                                                                                                                                                                                            TGGCGAACATGGTGAACCCCAT 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCAACATGCGGAACATGGTTAAC
                                                                                                                                                                                                                                                                                                                                                Conservative
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                                                                                                                                                                                                                         3417 from Patent W00188124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1110 from Patent
/note="Enzymatic Nucleic Acid"
8 c 10 g 12 t
                        /organism="synthetic construct"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/db_xref="taxon:9606"
11 c 4 g
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="unidentified"
/db_xref="taxon:32644"
7 c 9 g 1
                                                                                                                                                sequences
                                                                                                                                                                                                 GI:21528463
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77.3%;
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Pred. No. 2.3e
0; Mismatches
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Pred.
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                                                                        GROUP
                                                                                                                                                                                                                                                                                                                                                                                                           others
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                                                                                                                        Mclaughlin, F.G.
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PAT

0

Gaps

0;

LIMITED (GB)

PAT

18-JUN-2002

0;

Gaps

ORIGIN

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RESULT 15
AX114375
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                       BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
JOURNAL
Search completed: June 21, 2003, 22:14:32 Job time: 606.344 secs
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                                                                                                             Query Match 50.7
Best Local Similarity 66.7
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 50.7%; Score 15.2; DB 6; Length 37; Best Local Similarity 71.4%; Pred. No. 5.2e+04; Matches 20; Conservative 0; Mismatches 8; Indels
                                                                                                                                                                                                                variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      47 bp.
Sequence 44 from Patent W00129257.
AXII4375
AXII4375.1 GI:14031339
                                                                                                                                                                                                                                                                                        Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 47)
Schork,N. and Skierczynski,B.
Methods of genetic cluster analysis and use thereof
Patent: WO 0129257-A 44 26-APR-2001;
                                                                                                                                                                                                                                                                                   GENSET (FR)
                                                                                                                                                                               /note="99-1572-440 : polymorphic base C or T" ll a 14 c 14 g 7 t 1 others
                                                                                                                                                                                                               /organism="Homo sapiens"
/db_xref="taxon:9606"
24
                                                                                                                                                                                                                                                        Location/Qualifiers
1. .47
                                                                                                                            50.7%;
                                                                                                             Score 15.2; DB 6;
Pred. No. 5.3e+04;
1; Mismatches 9;
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GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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Maximum DB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Run on:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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Gapop 10.0 , Gapext 1.0
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/SIDS2/gcgdata/geneseq/geneseqn-embl/NA1983.DAT:*
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/SIDS2/gcgdata/geneseq/geneseqn-embl/Na2001B.DAT:*
                                                                                                         /SIDS2/gcgdata/geneseq/geneseqn-emb1/NA2002
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410.621 Million cell updates/sec
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|------------|-------------------|----------|--------------------|----------|----------|--------------|--------------------|--------------------|------------|--------------------|--------------------|--------------------|----------|----------|--------------------|----------|--------------------|----------|--------------------|--------------------|-------------------|-------------------|----------|----------|----------|----------|----------|----------|--------------------|--------------------|-----------|--------------------|----------|----------|-------------|--------------------|
|            | 45                | 44       | 43                 | 42       | 41       | 40           | 39                 | 38                 | 37         | ယ်<br>6            | ပ                  | 34                 | ω<br>ω   | 32       | 31                 | 30       | 29                 | 28       | 27                 | 26                 | 25                | 24                | 23       | 22       | 21       | 20       | 19       | 18       | 17                 | 16                 | 15        | 14                 | 13       | 12       | 11          | 10                 |
|            |                   | 15.6     |                    | 5        | 16       | 16           | 16                 | 16.2               | 16.2       | 9                  | 0                  | 6                  | 0        | 6        | 6                  | 17       | 7.                 | 7.       | 7.                 | 7.                 | .7                | 7.                | 7.       | 7.       | ٦.       |          | 7.       | 7        | 7.                 | 7.                 |           | 8                  | 00       | 8        | 18.4        |                    |
|            | 2                 | 2        | 2                  | 2        | ω.       | ω.           | ω.                 | 54.0               | 4.         | ٠                  | 4.                 | 5                  | S.       | 5        | 6.                 | 6.       | 7.                 | 7.       | 8                  | 8                  | œ                 | 8                 | 8        | 8        | α.       | 8        | 8        | 8        | 9.                 | 9.                 | 0.        | 0.                 | 0        | 0.       | 61.3        | 62.0               |
|            | 34                | 33       | 33                 | 31       | 41       | 41           | 33                 | ω<br>ω             | 22         | 41                 | 39                 | 40                 | 29       | 24       | 25                 | 29       | ω                  | 29       | 50                 | 47                 | 47                | 41                | 41       | 41       | 41       | <u>ω</u> | 41       | 41       | 33                 | 24                 | 29        | 34                 | ω<br>ω   | ω        | 29          | 47                 |
|            | 22                | 24       | 24                 | 22       | 24       | 24           | 24                 | 24                 | 21         | 24                 | 22                 | 22                 | 21       | 24       | 22                 | 21       | 24                 | 21       | 22                 | 22                 | 21                | 24                | 24       | 24       | 24       | 22       | 24       | 24       | 24                 | 22                 | 21        | 22                 | 24       | 24       | 21          | 24                 |
| ALIGNMENTS | AAH46543          | ABA02347 | ABK14188           | AAI30622 | ABK47939 | ABK47938     | ABL61326           | ABL49773           | AAD00662   | ABQ77547           | AAF74239           | AAH91207           | AAD00661 | ABA02134 | AAF84351           | AAA04503 | ABN84112           | AAA04311 | AAL28723           | AAF89248           | AAZ66299          | ABA96813          | ABA96812 | AAL43827 | AAL43826 | AAI65108 | ABA94081 | ABA94080 | ABA01398           | AAH91382           | AAA04312  | AAH27605           | ABK14174 | ABK12114 | AAA04485    | ABK41287           |
| TS .       | DNA polymerase 17 | Ε.       | Human splicing fac |          | н        | cotrophin re | Human Pur-alpha 13 | Human tyrosinase 1 | etic oligo | Human red blood ce | DNA analysis metho | Human inflammatory | Œ        | zinc ic  | Human CYP2C18i PCR | rphic 1  | Human protein 11.1 | orphic   | Human SNP oligonuc | Sample member clus | Human map-related | Human uteroglobin |          |          |          |          |          | multi-   | Human NF-E2-associ | Human inflammatory | Polymorph | Human II aminoacyl | e gi     | 9.5      | orphic frag | Human USF2 gene bi |

RESULT 1
AAA03983
ID AAAC

AAA03983 standard;

DNA; 29 ВР

AAA03983;

22-MAY-2000

(first entry)

Polymorphism: hypertension; agammaglobulinemia; diabetes insipidus; Lesch-Nyhan syndrome; muscular dystrophy; Wiskott-Aldrich syndrome; Fabrys disease; familial hypercholesterolemia; hereditary spherocytosis; polycystic kidney disease; von Willebrands disease; forensic; human; tuberous sclerosis; hereditary hemorrhagica telangiectasia; familial colonic polyposis; osteogenesis imperfecta; porphyria; Ehlers-Danlos syndrome; ss. 07-MAY-1998; 03-MAY-1999; (AFFY-) AFFYMETRIX INC. 07-MAY-1999; EP955382-A2 Homo sapiens Polymorphic fragment of hypertension associated gene APOC3. 10-NOV-1999 98US-0084641 99US-0304232 99EP-0250150

Result No.

score

Match

Length

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SUMMARIES

AAA03983

Polymorphic fragme Human NF-E2-associ Human NF-E2-associ Human DNA mismatch

Human tyrosinase 1 Human tyrosinase 1 Human map-related

Description

Query

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21.4 20.6 20.6 19.2 19 19 19

71.3 68.7 68.7 64.0 63.3 63.3 63.3

ABA01400 ABA01401 AAS15589 ABL49775 ABL49776 AAZ69526 AAX65537

AAI62905

Human Human

genomic

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Best Local S
Matches 22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 kidney disease, hereditary spherocytosis, von Willebrands disease, tuberous sclerosis, hereditary hemorrhagica telangiectasia, familial colonic polyposis, Ehlers-Danlos syndrome, osteogenesis imperfecta, a acute intermittent porphyria. The polymorphic forms can also be used forensics to identify individuals.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      diagnostic assays. Where the polymorphisms have strong correlation with hypertension, within a gene, they are likely to have a causative role in hypertension. This information can be used to find the precise role of a polymorphism in the disease, and this can be used to identify potential drugs which combat the disease. The polymorphisms can be tested for association with other diseases e.g. agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular dystrophy, Wiskott-Aldrich syndrome, Fabrys disease, familial hyperchoesterolemia, polycystic syndrome, Fabrys disease, familial hyperchoesterolemia, polycystic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention provides polymorphic fragments of genes associated with hypertension. The nucleic acids including the polymorphic sites can be used as probes or primers for expressing variant proteins. Detection of the polymorphisms is useful in designing prophylactic and therapeutic regimes customized to underlying abnormalities. The polymorphisms can bused for association studies for hypertension, and in hypertension disposed in association studies for hypertension, and in hypertension.
 Human NF-E2-associated factor in diagnosis and treatment of
                                                         WPI; 2002-025846/03.
                                                                                                                                                                                                                                                                                                                                                                               Human; NF-E2-associated factor 13; cytostatic; virucidal; immunomodulatory; antiinflammatory; haemostatic; gene therapy; haemopathy; HV infection; immunological disease; inflammation.
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                                                                                                                                       (BIOW-)
                                                                                                                                                                                                                19-MAR-2001; 2001WO-CN00368
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                                                                                                                                                                                                                                                                                            WO200175024-A2
                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                   developmental disorder; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human NF-E2-associated factor 13 probe #1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-JAN-2002 (first entry)
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22; Conserv
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                                                                                                                                       BIOWINDOW GENE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP; 9 A; 11 C; 5 G; 3 T; 1 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
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88.0%;
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Pred. No. 1
13 and
e.g. ma
                                                                                                                                     SHANGHAI
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nd encoded
malignant
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polynucleotide, applicable tumor, hemopathy, HIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21;
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Matches 23
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Best Local :
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                                                                                               The present invention relates to human NF-E2-associated factor AAM52544). The factor and its coding sequence are useful in the and treatment of malignant tumours, haemopathy, HIV infection, immunological diseases, various inflammations and developmenta disorders. The present sequence is a probe, which was used in
                                                                                                                                                                                                                     Human NF-E2-associated factor 13 and encoded polynucleotide, applicable in diagnosis and treatment of e.g. malignant tumor, hemopathy, HIV infection, immunological diseases and inflammation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAM52544). The factor and its coding sequence are useful in the and treatment of malignant tumours, haemopathy, HIV infection, immunological diseases, various inflammations and developmenta disorders. The present sequence is a probe, which was used in
                                                                                                                                                                                        Example 6; Page 15; 34pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABA01401 standard;
                                                         Sequence 41 BP;
                                                                                                                                                                                                                                                                                                           мао Y,
                                                                                                                                                                                                                                                                                                                                                                     22-MAR-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                developmental disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; NF-E2-associated factor 13; cytostatic; virucidal;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human
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                                                                                                                                                                                                                                                                                                                                        (BIOW-) BIOWINDOW GENE DEV INC SHANGHAI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            haemopathy; HIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             infection,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .mmunomodulatory;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NF-E2-associated factor 13 probe #2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 ATCAACCTGGCGAACATGGTGAACCCC 27
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                Similarity
                                                                                       from the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           immunological diseases and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                     2000CN-0115024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first
                                                           7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            infection; immunological disease; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15; 34pp; Chinese
                                                                                       present invention
                                                           A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antiinflammatory;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; 11 C; 13 G; 10 T; 0 other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   entry)
               68.7%;
                                                           11 C; 13
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85.2%;
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                                                         10 T; 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             haemostatic;
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                                                           other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gene therapy; tumour;
                            Length
                                                                                                                 developmental
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                               41;
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RESULT 4
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                                        RESULT 5
ABL49775/c
ID ABL49775 standard;
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                                                                                                                                                                                               Query Match
Best Local
                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                               The invention relates to an isolated polypeptide of human DNA mismatch repair protein 10. The polypeptide can be used for screening mimics, agonists, antagonists or inhibitors, or in peptide fingerprinting identification. The polypucleotide can be used as primers for nucleic acid amplification reactions, as probes for hybridisation reactions, or in producing gene chips or microarray. Drug compositions, which contain the polypeptide, polynucleotide, mimics, agonists, antagonists, inhibitors and their preparations, can be used treatment and diagnosis of diseases relating to the polypeptide. In particular, the contain the polypeptide of diseases relating to the polypeptide. In particular, the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI;
            ABL49775;
                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                        mismatch repair protein 10.
                                                                                                                                                                                                                                                                                     polypeptide and encoded polynucleotide are applicable in diagnosis and treatment of malignancy, haemopathy, human immunodeficiency virus (HIV) infection, immunological diseases and various inflammations. The present sequence represents PCR primer #2 used to amplify human DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 4; Page 13; 36pp; Chinese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New human DNA mismatch repair protein 10 for diagnosing and treating malignancy, haemopathy, human immunodeficiency virus infection, immunological diseases and inflammation -
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immunomodulatory; antiinflammatory; haemostatic; anti-HIV; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human DNA mismatch repair protein 10, PCR primer #2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        immunological disease;
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                                                                                                                                                                                            Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      immunodeficiency virus; malignancy; haemopathy; infection;
ological disease; PCR primer; ss.
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                                                                                                                                                                                 21;
                                                                                                                                                                                              Similarity
                                                                                                                                    TCAACCTGGCGAACATGGTGAACC
                                                                                                                                                                                                                                              ω
W
                                                                                                                     TCAGCCTGGCCAACATGGTGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCAGCCTGGCCAACATGGTGAAACCC
                                                                                                                                                                                                                                           BP; 9 A;
                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA;
                                                                                                                                                                                            64.0%;
87.5%;
                                                                                                                                                                                                                                           10 C; 8
                                           41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              \omega
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ВP
                                                                                                                                                                               0;
                                                                                                                                                                              Score 19.2; DB 24;
Pred. No. 1.1e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                           ç;
                                                                                                                                                                                                                                           6 T; 0 other;
                                                                                                                    ω
W
                                                                                                                                                                                                            DB 24;
                                                                                                                                                                                                            Length
                                                                                                                                                                               Indels
                                                                                                                                                                                                            3
3;
                                                                                                                                                                              0;
                                                                                                                                                                              Gaps
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RESULT 6
ABL49776/c
ID ABL49776
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PR XX
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                                                                                                                   XX
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₹
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 invention also described a method for preparing (I) using DNA recombination techniques. (I) and the polynucleotide encoding it can be used in the treatment of diseases such as cancer and human immunodeficiency virus (HIV) infection. The present sequence represents a probe for human tyrosinase 10.34, which is used in an example from
                                                                                                                                                                 CN1325972-A.
                                                                                                                                                                                                                                     Human; tyrosinase;
HIV infection; can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 41 BP; 5 A; 12 C; 13 G; 11 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New polypeptide-tyrosinase 10.34 for treating diseases such as cancer and human immunodeficiency virus infection -
                                                                 31-MAY-2000; 2000CN-0116261
                                                                                                 31-MAY-2000;
                                                                                                                                   12-DEC-2001
                                                                                                                                                                                                     Homo
                                                                                                                                                                                                                                                                                       Human tyrosinase 10.34 probe 2 SEQ ID NO:9
                                                                                                                                                                                                                                                                                                                          29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention describes human tyrosinase 10.34 (I).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 6; Page 19 (Disclosure); 32pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-196693/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              мао У,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2000; 2000CN-0116261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2000; 2000CN-0116261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HIV infection; cancer; probe; ss.
                              (BODE-) BODE GENE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (BODE-) BODE GENE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; tyrosinase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tyrosinase 10.34 probe 1 SEQ ID NO:8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 ATCAACCTGGCGAACATGGTGAACCCC 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Xie Y;
                                                                                                                                                                                                                                                                                                                                                                                            standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCAGCCCGGCCAACATGGTGAAACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                 2000CN-0116261
                                                                                                                                                                                                                                     cancer; probe; ss
                              DEV CO LTD SHANGHAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEV CO LTD SHANGHAI
                                                                                                                                                                                                                                                     enzyme; human immunodeficiency virus infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       enzyme; human immunodeficiency virus infection;
                                                                                                                                                                                                                                                                                                                                                                                            DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                63.3%;
                                                                                                                                                                                                                                                                                                                                                                                            41
                                                                                                                                                                                                                                                                                                                                                                                            ВP
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Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19;
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5,
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RESULT 7
AAZ69526/c
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Best Local S
Matches 22
    AAZ65654 to AAZ69578 represent human biallelic markers from the pre-
invention, which contain a polymorphic base at position 24 of their
nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
primers for the biallelic markers. The biallelic markers of the
                                                             Claim
                                                                               Novel biallelic markers map of the human genome
                                                                                                                WPI; 2000-013267/01
                                                                                                                                      Cohen
                                                                                                                                                                                                                                                         WO9954500-A2
                                                                                                                                                                                                                                                                                                             Key
                                                                                                                                                                                                                                                                                                                                                      diagnosis; single nucleotide
                                                                                                                                                                                                                                                                                                                                                                         Human genome;
genomic map; }
                                                                                                                                                                                                                                                                                                                                                                                                         Human map-related biallelic marker SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAZ69526;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAZ69526 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI;
                                                                                                                                                          (GEST )
                                                                                                                                                                               23-NOV-1998;
                                                                                                                                                                                         21-APR-1998;
                                                                                                                                                                                                              21-APR-1999;
                                                                                                                                                                                                                                    28-OCT-1999
                                                                                                                                                                                                                                                                                                                                   Homo
                                                                                                                                                                                                                                                                                                                                                                                                                               10-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention describes human tyrosinase 10.34 (I). The present invention also described a method for preparing (I) using DNA recombination techniques. (I) and the polynucleotide encoding it can be used in the treatment of diseases such as cancer and human immunodeficiency virus (HIV) infection. The present sequence represents a probe for human tyrosinase 10.34, which is used in an example from
                                                                                                                                                                                                                                                                                                   variation
                                                                                                                                                                                                                                                                                                                                                                haplotyping;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 6; Page 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      polypeptide-tyrosinase
                                                                                                                                                                                                                                                                                                                                 sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2002-196693/26
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for
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 41
                                                            Page 1058;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCAGCCCGGCCAACATGGTGAAAACCC 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCAACCTGGCGAACATGGTGAACCCC
                                                                                                                                     Blumenfeld
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           immunodeficiency virus infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP; 5 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                             biallelic marker; high density disequilibrium map;
haplotype; phenotype; polymorphic base; genotyping;
hybridiaation; identification; characterisation;
                                                                                                                                                                                                                                                                                                                                                                                                                              (first
                                                                                                                                                                             98US-0082614
98US-0109732
                                                                                                                                                                                                              99WO-IB00822
                                                                                                                                                                                                                                                                                       replace(24,T)
/*tag= a
                                                                                                                                                                                                                                                                           /standard_name=
                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (Disclosure);
                                                          2745pp;
                                                                                                                                                                                                                                                                                                                                                                                                                             entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              63.3%;
                                                                                                                                     ĭ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                <u>ე</u>
                                                                                          used to
                                                                                                                                     Chumakov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10.34 for treating diseases
virus infection -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13 G;
                                                           English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 19;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                      polymorphism;
                                                                                          construct a
                                                                                                                                                                                                                                                                            "single nucleotide polymorphism"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     32pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.4e+02;
5;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               other;
                                                                                                                                                                                                                                                                                                                                                                                                          NO:3882
                                                                                                                                                                                                                                                                                                                                                      SNP;
                                                                                         high
                                                                                                                                                                                                                                                                                                                                                      ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 41;
                                                                                          density disequilibrium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      such
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cancer
                                   present
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RESULT 8
AAK65537/c
ID AAK655
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20202020202020
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Best Local S
Matches 22
                     11-JUL-2000
14-JUL-2000
26-JUL-2000
26-JUL-2000
14-AUG-2000
14-AUG-2000
14-AUG-2000
14-AUG-2000
14-AUG-2000
14-AUG-2000
14-AUG-2000
14-AUG-2000
14-AUG-2000
                                                                                                                                                                                                                                                     02-MAR-2000;
16-MAR-2000;
17-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the differential efficacious responses to and side effects from pharmaceutical agents acting on a disease as well as other treatment.
                                                                                                                                                            07-JUL-2000;
11-JUL-2000;
                                                                                                                                                                                  30-JUN-2000;
07-JUL-2000;
                                                                                                                                                                                                         07-JUN-2000;
28-JUN-2000;
                                                                                                                                                                                                                                                                                                                                    17-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N.B. The SEQ ID NOS 2852, and 3367, are not actually
                                                                                                                                                                                                                                                                                     24-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                 WO200157182-A2
                                                                                                                                                                                                                                                                                                                                                                                                                             cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; immune; haematopoietic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    06-NOV-2001- (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAK65537;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 47
                                                                                                                                                                                                                                 19-MAY-2000;
                                                                                                                                                                                                                                           18-APR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3367, are not actually the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             immune/haematopoietic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
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2000US-0217496.
2000US-0218990.
2000US-0220963.
2000US-0220964.
2000US-0224519.
2000US-0225213.
2000US-0225214.
2000US-0225266.
2000US-0225267.
2000US-0225267.
2000US-0225267.
2000US-0225277.
2000US-0225277.
                                                                                                                                                                                2000US-0186350.

2000US-0188974.

2000US-0190076.

2000US-0198123.

2000US-0205515.

2000US-0205467.

2000US-0215135.

2000US-0215647.
                                                                                                                                                                                                                                                                                                                                                                                                                             gene
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                                                                                                                                                                                                                                                                                                                                     2001WO-US01354
                                                                                                                                                            2000US-0216880
2000US-0217487
                                                                                                                                                                                                                                                                                        2000US-0184664
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                                                                                                                                                                                                                                                                                                                                                                                                                           therapy; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                actually given a sequence in the Sequence Listing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               63.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14 C; 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  49
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Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                G; 13 T;
                                                                                                                                                                                                                                                                                                                                                                                                                             immune/haematopoietic antigen; cancer;
ine; metastasis; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             genomic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 21;
1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3096,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3157,
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well as other
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25-SEP-2000;
26-SEP-2000;
27-SEP-2000;
29-SEP-2000;
29-SEP-2000;
29-SEP-2000;
29-SEP-2000;
29-SEP-2000;
02-OCT-2000;
02-OCT-2000;
02-OCT-2000;
02-OCT-2000;
02-OCT-2000;
02-OCT-2000;
02-OCT-2000;
02-OCT-2000;
02-OCT-2000;
03-OCT-2000;
03-OCT-2000;
04-NOV-2000;
08-NOV-2000;
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114-AUG-2000
18-AUG-2000
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2000US-0246613
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2000US-0251030
2000US-02511856
                                                                                                                                                                                                                                                          SCI INC
                                                                                                                                                                                                                                         Ruben
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nucleic acids encoding human immune/hematopoietic antigen polypeptides, useful for preventing, diagnosing and/or treating cancers and metastasis -

Disclosure; SEQ IJ Ö 20349; 3071pp + Sequence Listing; English

amino acid sequences given in AAM82170 to AAM91921. (1) have cytostatic cativity, and can be used in gene therapy and vaccine production. (I) composed and polynucleotides may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate (I) expression. For example, they may be used to treat disorders associated with decreased expression by rectifying mutations or deletions in a patient's genome that affect the activity of (I) by expressing inactive proteins or to supplement the patients own production of (I). Additionally, (I) polynucleotides may be used to produce the secreted (I), by inserting the nucleic acids into a host cell and culturing the cell to express the protein. (I) proteins and polynucleotides may be used to prevent, additionally connects and cancer metastases of haematopoietic-related diseases, especially connects and cancer metastases of haematopoietic antigen genomic sequences from the present invention. AAK54942 to AAK84950 and AAM82169 crepresent sequences used in the exemplification of the present invention. AAK54951 to AAK64702 encode the human immune/haematopoietic antigen amino acid sequences given in AAM82170 to AAM91921. (1) have cytosta opoietic antigen (I) (I) have cytostatic present invention the and

Sequence 49 вр; 11 A; 12 C; 13 G; 13 T; 0 other;

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Query Match
Best Local 9
Matches
l Similarity 81.
      63.3%;
0;
      Score 19;
Pred. No.
Mismatches
      1.4e+02;
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Indels
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RESULT 9 AAI62905

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ACCATCCTGGCTAAAATGGTGAAACCC 

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                       treating, proteins,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; nootropic; neuroprotective; cytostatic; dermatological; virucide; immunosuppressive; antiinflammatory; anti-HIV; antibacterial; vulnerary; antiparkinsonian; antisickling; antianaemic; antiarthritic; cancer; antiiparkinsonian; to epatotropic; cerebroprotective; antiinflammatory; antirheumatic; hepatotropic; derebroprotective; antiinflammatory; antiallergic; antidiabetic; antiulcer; anticonvulsant; antifungal; antiparasitic; cardiant; immune disorder; cardiovascular disorder; ancorpoic; gene therapy; vaccine; neurological disease; infection; nephrotropic; gene therapy; vaccine;
  Example
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13-OCT-2000;
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                                               Novel
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                      plasma membrane associated proteins useful
ing, preventing and/or prognosing disorders
ins, including cancer, immune response and r
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233; 532pp + Sequence Listing; English
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neuronal disorders
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estimating the

frequency of an allele

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ABK41287/c
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                  The invention relates to a set of novel map-related biallelic markers preferably located on obesity disorder-associated chromosomal regions chromosomes 3, 10 and 19. The markers are useful for genotyping or
                                                                                                                                                                                                                                 Set of novel map-related biallelic markers, preferably located on obesity disorder-associated chromosomal regions on chromosomes 3, 10 and 19, useful, for e.g. detecting statistical correlations between
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; obesity associated-biallelic marker; ds; LSR; USF2; drug response; hyperuricaemia; digestive pathology; hypertension; cance hepatic function disorder; cardiovascular disease; hyperlipidaemia; insulin disorder; atheromatous disease; cardiac insufficiency; obesity.
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                                                                                                                                                                                                                                                                                                                                                                                                                         Cohen
                                                                                                                                                                                                        marker allele and a phenotype
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                   The invention provides polymorphic fragments of genes associated with hypertension. The nucleic acids including the polymorphic sites can be used as probes or primers for expressing variant proteins. Detection of the polymorphisms is useful in designing prophylactic and therapeutic regimes customized to underlying abnormalities. The polymorphisms can be used for association studies for hypertension, and in hypertension diagnostic assays. Where the polymorphisms have strong correlation with hypertension. This information can be used to find the precise role of a hypertension. This information can be used to find the precise role of a hypertension in the disease, and this can be used to identify potential
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                                                                                                                                                                                                                                                                                                                          Claim 1;
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03-MAY-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAA04485 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        association between a genotype or haplotype and a phenotype, e.g. a disease involving drug responses, obesity or disorders related to obesity, such as hyperuricaemia, digestive pathology, hepatic function disorders, cancer, cardiovascular disease, hypertension, hyperlipidaem
                                                                                                                                                                                                                                                                                                                                                                         hypertension
                                                                                                                                                                                                                                                                                                                                                                                                  Novel nucleic acids containing polymorphisms used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EP955382-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Polymorphic fragment of hypertension associated gene PGIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ehlers-Danlos
                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000-107928/10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AFFYMETRIX INC.
UNIV CASE WESTERN RESERVE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                       Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chakravarti A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCATCMTGGCTAACACGGTGAAACCC 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCAACCTGGCGAACATGGTGAACCCC 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP; 8 A; 14 C; 11 G; 13 T; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first
                                                                                                                                                                                                                                                                                                                       38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-0084641.
99US-0304232.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           62.0%;
77.8%;
                                                                                                                                                                                                                                                                                                                    English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Haluska
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 18.6;
Pred. No. 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ķ
polymorphisms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .1e+02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DΒ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24;
                                                                                                                                                                                                                                                                                                                                                                                                  in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                  the
                                                                                                                                                                                                                                                                                                                                                                                               diagnosis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           hyperlipidaemia,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
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Ωy

1 ATCAACCTGGCGAACATGGTGAA

Query Match Best Local Matches

Similarity

60.7%; 87.0%;

Score 18.2;

Pred.

NO.

2.9e+02; 3; DB

0;

Gaps

0;

Length Indels

Conservative

0;

Mismatches

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RESULT 12
ABK12114/c
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                                                                                                                                                                                                                                                                                            Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local :
                                   deficiency, neur
deficiency, neur
                                                The invention relates to an isolated polypeptide of human EHD 9.57, the cDNA encoding it, and its fragment, analogue or derivative. Also included are vectors expressing the protein, a host cell comprising the vector, the isolation of modulators of the protein and an anti-EHD antibody. The protein and nucleic acid are used in diagnosis and treatment of a fetation abnormality, tumour, immune deficiency, neural system dysfunction disease, and protein metabolism disciplency, neural system dysfunction disease, and protein metabolism
                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; ss; PCR; EHI immune deficiency;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       colonic polyposis, Ehlers-Danlos syndrome, osteogenesis imperfecta, and acute intermittent porphyria. The polymorphic forms can also be used in forensics to identify individuals.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           syndrome, Fabrys
kidney disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      association with other diseases e.g. agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular dystrophy, Wiskott-Aldrich syndrome, Fabrys disease, familial hypercholesterolemia, polycystic
 Sequence 33
                                                                                                                                                                                   Human EHD protein 9.57 and treatment of -
                                                                                                                                                                                                                           WPI; 2002-172121/22
                                                                                                                                                                                                                                                     мао у,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             kidney disease, hereditary spherocytosis, von Willebrands disease, tuberous sclerosis, hereditary hemorrhagica telangiectasia, familial
                                                                                                                                                                                                                                                                                                        30-JUN-2000; 2000CN-0116935
                                                                                                                                                                                                                                                                                                                                  29-JUN-2001; 2001WO-CN01107
                                                                                                                                                                                                                                                                                                                                                           14-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                     WO200211513-A1
                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                       protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABK12114 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                              (SHAN-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CHI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19;
                                                                                                                                                                                                                                                                               SHANGHAI BIOWINDOW GENE DEV
                                                                                                                                                                                                                                                                                                                                                                                                                                        metabolism
                          the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCTGGCCAACATGGYGAAACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTGGCGAACATGGTGAACCCC 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9.57
                                                                                                                                                         Page
                                                                                                                                                                                                                                                                                                                                                                                                                                               PCR; EHD 9.57; fetation abnormality; tumou iciency; neural system dysfunction disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP;
 BP; 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                           EHD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first
                                     present sequence is a PCR primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein PCR primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               σ
                        protein (not defined).
 Α,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ā;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   entry)
                                                                                                                                                        40pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61.3%;
10 C; 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11 C; 6 G; 5 T; 1 other;
                                                                                                                                                                                              and encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ω
ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                               fetation abnormality; tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ΒP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1;
 G; 9 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           #2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           : 18.4;
No. 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NO.
                                                                                                                                                                                              polynucleotide,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3e+02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DΒ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                              used
                                       ç
                                       clone the
                                                                                                                                                                                                                                                                                                                                                                                                                                                               primer;
                                                                                                                                                                                                in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29;
                                                                                                                                                                                              diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                       CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
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B

31

ACCACCCTGGCCAACATGGTGAA 9

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RESULT 14
AAH27605/c
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                                                                                                                                                                                                                                                 Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 13
ABK14174/c
                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                  Human II aminoacyl-tRNA synthetase 9
                                                                                                                                                                                                                                                                                                                                                                           11.88 and the DNA sequence encoding the polypeptide. The DNA and protein are used in diagnosis and treatment of malignant tumour and dysmorphia of development of an embryo. This sequence represents a PCR primer used for cloning of cDNA which encodes the insulin like growth factor binding protein 11.88 of the invention.
          Homo sapiens.
                                                                                                                              31-AUG-2001
                                                                                                                                                                                 AAH27605 standard;
                                                                                                                                                                                                                                                                                                                                                    Sequence 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2002-172159/22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unidentified
                                 human immunodeficiency virus; HIV inflammatory disease; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to an insulin like growth factor binding protein 11.88 and the DNA sequence encoding the polypeptide. The DNA and prote
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Insulin like growth factor binding protein 11.88 and encoding polynucleotide, used in diagnosis and treatment of malignant tumours
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14-JUN-2000; 2000CN-0116491.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-JUN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200212493-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Insulin like growth factor binding protein 11.88 cDNA PCR primer #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABK14174;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABK14174 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (BIOW-) BIOWINDOW GENE DEV INC SHANGHAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Insulin like growth factor binding protein 11.88; embryo development dysmorphia; malignant tumour; g
                                                .mmunomodulatory; antiinflammatory; cancer; haemopathy; uman immunodeficiency virus; HIV; infection; immunolog
                                                                                                                                                                                                                                                                                                                Local
                                                                                                                                                                                                                                                 31
                                                                     II aminoacyl-tRNA synthetase 9; cytostatic; antiviral;
                                                                                                                                                                                                                                                             1 ATCAACCTGGCGAACATGGTGAA 23
                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4; Page 13; 38pp; Chinese.
                                                                                                                                                                                                                                               ACCAGCCTGGCCAACATGGTGAA 9
                                                                                                                                                                                                                                                                                                                                                    BP; 5 A; 11 C; 8 G; 9 T; 0 other;
                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2001WO-CN00951
                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first
                                                                                                                                                                                 DNA;
                                                                                                                                                                                                                                                                                                           60.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        entry)
                                                                                                                                                                                 34
                                                                                                                                                                                 ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ВP
                                                                                                                                                                                                                                                                                                  0,
                                                                                                                                                                                                                                                                                                              Score 18.2;
Pred. No. 2
                                                                                                                                                                                                                                                                                                  Mismatches
                                     SS
                                               infection; immunological disease;
                                                                                                 PCR primer 4.
                                                                                                                                                                                                                                                                                                              .9e+02;
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                                                                                                                                                                                                                                                                                                                          24;
                                                                                                                                                                                                                                                                                                  w
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; primer; ss; 
gene therapy;
                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ss; cytostatic;
                                                                                                                                                                                                                                                                                                0; . Gaps
                                                                                                                                                                                                                                                                                               0;
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RESULT 15
AAA04312/c
.ID AAA043
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to an isolated polypeptide of human II aminoacyl-tRNA synthase 9. The polypeptide comprises the 86 amino acid sequence defined in the specification, or its fragment, analogue or derivative. The polypeptide and the polynucleotide encoding it are useful in the diagnosis and treatment of malignant tumours, haemopathy, HIV infection, immunological diseases and various inflammatory diseases. The polypucleotide is useful as a primer for nucleic acid amplification reactions or as a probe for hybridisation reactions, or in producing gene chips or microarrays. The polypeptide is useful for screening mimics, agonists, antagonists or inhibitors, or for use in peptide fingerprinting identification. The present sequence is a primer which was used to
             07-MAY-1998;
03-MAY-1999;
                                                                                                                                                                                                                     Fabrys disease; familial hypercholesterolemia; hereditary spherocytosis; polycystic kidney disease; von Willebrands disease; forensic; human; tuberous sclerosis; hereditary hemorrhagica telangiectasia;
                                                             07-MAY-1999;
                                                                                                                           EP955382-A2
                                                                                                                                                                                                                                                                     Polymorphism; hypertension; agammaglobulinemia; diabetes insipidus; Lesch-Nyhan syndrome; muscular dystrophy; Wiskott-Aldrich syndrome;
                                                                                                                                                                                                                                                                                                                    Polymorphic fragment of hypertension associated gene GLUT4.
                                                                                                                                                                                                                                                                                                                                                                                                                   AAA04312 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 34 BP; 6 A; 11 C; 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human II aminoacyl-tRNA synthase 9 and encoded polynucleotide, in diagnosis and treatment of malignant tumor, hemopathy, HIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-374843/39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200140487-A1
                                                                                             10-NOV-1999
                                                                                                                                                         Homo sapiens
                                                                                                                                                                                          Ehlers-Danlos
                                                                                                                                                                                                                                                                                                                                                      22-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                     AAA04312;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           amplify the polynucleotide encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 4; Page 13; 38pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (BIOR-) BIOROAD GENE DEV LTD SHANGHAI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-NOV-2000; 2000WO-CN00512
                                                                                                                                                                                                      tuberous sclerosis; hereditary hemorrhag: familial colonic polyposis; osteogenesis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 ATCAACCTGGCGAACATGGTGAA 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
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99US-0304232
                                                            99EP-0250150
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The invention provides polymorphic fragments of genes associated with CR hypertension. The nucleic acids including the polymorphic sites can be used as probes or primers for expressing variant proteins. Detection of the polymorphisms is useful in designing prophylactic and therapeutic regimes customized to underlying abnormalities. The polymorphisms can be used for association studies for hypertension, and in hypertension and in hypertension conditions the polymorphisms have strong correlation with hypertension, within a gene, they are likely to have a causative role in hypertension. This information can be used to find the precise role of a polymorphism in the disease, and this can be used to identify potential crowdidus, Lesch-hyban syndrome, muscular dystrophys, Wiskott-Aldrich syndrome, Fabrys disease, familial hypercholesterolemia, polycystic kidney disease, hereditary spherocytosis, von Willebrands disease, tuberous sclerosis, hereditary spherocytosis, von Willebrands disease, colonic polyposis, Ehlers-Danlos syndrome, osteogenesis imperfecta, and content intermittent porphyria. The polymorphic forms can also be used in Grensics to identify vindivaluals.
                                                                                                                                            Matches
                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                             Sequence 29 BP; 5 A; 7 C; 7 G; 9 T; 1 other;
                                                                                                                                                                                                                                                                                                                                                  forensics to identify individuals
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2000-107928/10
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(UYCA-) UNIV CASE WESTERN RESERVE.
26 ACCATTCTGGCYAACATGGTGAAACC 1
                                                                                                                                     21; Conservative
                                       1 ATCAACCTGGCGAACATGGTGAACCC 26
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Pred. No. 3.4e+02;
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Search completed: June 21, 2003, 22:26:22 Job time: 165.531 secs

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          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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1: /cgn2_6/ptodata/1

2: /cgn2_6/ptodata/1

3: /cgn2_6/ptodata/1

4: /cgn2_6/ptodata/1

5: /cgn2_6/ptodata/1

6: /cgn2_6/ptodata/1
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/cgn2_6/ptodata/1/ina/5B_COMB.seq:*
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/cgn2_6/ptodata/1/ina/6B_COMB.seq:*
/cgn2_6/ptodata/1/ina/FCTUS_COMB.seq:*
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US-08-747-536-14
US-08-256-368-14
US-09-297-269-36
US-07-718-490-1
US-08-491-496-7
US-08-491-496-7
US-08-491-496-7
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  Sequence
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  259, Appli 2, Appli 6, Appli 17, App
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| CURRENT FI PRIOR APPL LENGTH: 4 TYPE: DNA TYPE: DNA ORGANICS: FEATURE: NAME/KEY: NAME/KEY: OTHER INF US-09-641-638 Query Match Best Local Matches 2 Qy 1 Db 17   | RESULT 1 US-09-641-638-659 Sequence 659, Applic Patent No. 6432648 GENERAL INFORMATION: APPLICANT: Blumenf APPLICANT: Chumako APPLICANT: Cohen, TITLE OF INVENTION: FILE REFERENCE: GE                 | 0 0 28 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  |
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| T FILING DATE: 2000-08-16 APPLICATION NUMBER: US 09/502.3 FILING DATE: 2000-02-11 APPLICATION NUMBER: US 60/133.2 FILING DATE: 1999-05-07 FILING DATE: 1999-05-07 APPLICATION NUMBER: US 09/275.2 FILING DATE: 1999-02-12 OF SEQ ID NOS: 1304 RE: Patent.pm NO 659 H: 47 DNA TISM: Homo Sapiens RE: WEY: allele TON: 24 INFORMATION: 10-520-256: polym-638-659 atch 62.0%; Score 1 cal Similarity 77.8%; Pred. N 21; Conservative 1; Mism 1 ATCAACCTGGCGAACATGGTGAAACCCC  | 1-638-659 No. 6432648 No. 6432648 L INFORMATION: CANT: Blumenfeld, Marta CANT: Bougueleret, Lydie CANT: Chumakov, Ilya CANT: Cohen, Annick OF INVENTION: GENES INV                                     | 4 4 4 4 4 4 4 4 4 6 6 6 6 6 6 6 6 6 6 6   |
| DATE: 2000-08- ION NUMBER: US ATE: 2000-02-11 ION NUMBER: US ATE: 1999-05-07 ION NUMBER: US ATE: 1999-03-23 ION NUMBER: US ATE: 1999-02-12 ID NOS: 1304 ent.pm  O Sapiens ele ent.pm 62.0%; Conservative AACCTGGCGAACATGGIIIIIIIIIIIIIIIIIIIIIIII   | Application US/09641638 Application US/09641638 AZTION: Lumenfeld, Marta lumenfeld, Marta cougueleret, Lydie humakov, Ilya cohen, Annick NTION: BIALLELIC MARKE NTION: GENES INVOLVED E: GENSET.051CP1 | 3333333244322333<br>30000000000000000000000   |
| 0000-08<br>RP: US<br>RP: US<br>RP: US<br>RP: US<br>PP: 05-03-2<br>PP: 05-2<br>PP: US<br>PP: US<br>P | US/09  Marta Lydie ya  LLLELIC ES INV  | . 4241421424  |
|   |  |   |
| -08-16<br>-08-16<br>US 09/502,<br>2-11<br>US 60/133,<br>US 60/119,<br>3-23<br>US 60/119,<br>4<br>4<br>1<br>2-12<br>-256 : poly<br>-256 : poly<br>-256 : poly<br>-256 : pied.<br>Nis<br>ATGGTGAAACCO   | 7,09641638 tta die die LIC MARKERS INVOLVED IN   |   |
| 16<br>09/502,330<br>09/502,330<br>09/275,267<br>09/275,267<br>60/119,917<br>: polymorphic<br>: polymorphic<br>: score 18.6;<br>pred. No. 24;<br>i; Mismatches<br>TGAAACCC 27<br>1   | ERS ERS  | 08-642-255 08-475-211 08-475-211 08-475-211 08-475-211 08-791-199 09-593-589 09-593-589 09-79-860 08-707-860 09-159-274 07-789-179 07-789-179 08-444-939 08-444-931 08-444-931 08-444-931 08-444-931 08-450-733 |
| 30<br>00<br>00<br>57<br>57<br>117<br>117<br>117<br>117<br>117<br>117<br>117<br>117<br>1   | DER  | -642-255-2: -475-411A-: -478-99A-: -991-199b-: -593-589-8: -593-589-8: -766-014-11-1 -707-860D-: -159-74-2: -789-179-7 -240-712-11 -444-939-7 -444-939-7 -445-733-7 -058-562-11                                 |
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| 9   | CARRYING   | Appl<br>Appl<br>Appl<br>Appl<br>Appl<br>Appl<br>Appl<br>Appl  |

RESULT 2
US-09-280-805-259
; Sequence 259, Application US/09280805
; Patent No. 6184212
; GENERAL INFORMATION:
; APPLICANT: Loren J. Miraglia, Pamela Nero,
; APPLICANT: Graham, Brett P. Monia

NUMBER OF SEQUENCES: 2 CORRESPONDENCE ADDRESS:

OF INVENTION:

ANTISENSE MODULATION OF HUMAN MDM2 EXPRESSION

STREET: 66 Eq.

66 East Main Street

Law Offices of Jane Massey Licata

ADDRESSEE:

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OTHER INFORMATION: Synthetically generated oligonucleotides US-09-171-425-2
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                                                                                                                                                 SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: Schorr, Joachim
                                                                                                                                                                                                                                                                                                                                                                   Sequence 2, Application US/09171425A Patent No. 6465438
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local
                                                                                                                                                                                                                               TITLE OF INVENTION: NUCLEIC ACID VACCINATION FOR PARVOVIRAL INFECTIONS FILE REFERENCE: 08909/003001
CURRENT APPLICATION NUMBER: US/09/171,425A
CURRENT FILING DATE: 1998-10-19
                                                                                                                                                                                                                                                                                               APPLICANT: Baker, Henry J. APPLICANT: Smith, Bruce F.
                                                                                                                                                                                                 EARLIER APPLICATION NUMBER: PCT/EP97/01943
EARLIER FILING DATE: 1996-04-19
                                                                                                                                                                                   NUMBER OF SEQ ID NOS: 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: 609-810-1454
ENFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                   FEATURE:
                                                                                                                TYPE: DNA
                                                                                               ORGANISM: Artificial Sequence
                                                                                                                                ENGTH: 42
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TOPOLOGY: Lin
ANTI-SENSE: Yes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Licata, Jane Massey REGISTRATION NUMBER: 32,727 REFERENCE/DOCKET NUMBER: ISITELECOMMUNICATION INFORMATION: TELEPHONE: 609-810-1515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/048,
FILLING DATE: MATCH 26, 1998
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
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    1: 20 base pairs
Nucleic Acid

                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGCTAACACGGTGAAACCC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                50.7%;
 50.0%;
78.3%;
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Score
Pred.
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Pred. No. 5.6e+02;
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No.
DB 4; 1
7.6e+02;
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               Length 42
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US-09-171-425-7/c
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US-09-171-425-6
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                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                  SEQ ID NO 7
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LENGTH: 48
                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 7, Application US/09171425A Patent No. 6465438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 6, Application US/09171425A Patent No. 6465438
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                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/171,425A
CURRENT FILING DATE: 1998-10-19
EARLIER APPLICATION NUMBER: PCT/EP97/01943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Schorr, Joachim APPLICANT: Baker, Henry J. APPLICANT: Smith, Bruce F.
                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Schorr, Joachim
APPLICANT: Baker, Henry J.
APPLICANT: Smith, Bruce F.
TITLE OF INVENTION: NUCLEIC ACID VACCINATION FOR PARVOVIRAL INFECTIONS
FILE REFERENCE: 08909/003001
                                                                                                                                                                                                                                                                 SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                   EARLIER FILING DATE: 1996-04-19
                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: FastSEQ for Windows Version 4.0
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EARLIER FILING DATE: 1996-04-19
NUMBER OF SEQ ID NOS: 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: NUCLEIC ACID VACCINATION FOR PARVOVIRAL INFECTIONS FILE REFERENCE: 08909/003001
CURRENT APPLICATION NUMBER: US/09/171,425A
CURRENT FILING DATE: 1998-10-19
                                                                                                                                                       FEATURE:
OTHER INFORMATION: Synthetically generated oligonucleotides
                                                                                                                                                                                           TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE: OTHER INFORMATION: Synthetically generated oligonucleotides
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                                                                                                                                                                                                                                  LENGTH: 48
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                     1 ATCAACCTGGCGAACATGGTGAA 23
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ATCAACCTGGCTAAGAAGAAGAA 12
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                                                                       Conservative
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78.3%;
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Pred. No.
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                                                                                     Score 15; DB 4; Pred. No. 7.8e+02;
                                                                   Mismatches
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                                                                                                      Length 48;
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US-08-747-536-17
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                                                                                                                                                                                                                                                                                                                                                                                                                               Patent No. 6087485
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 171, Application US/09009913
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INFORMATION FOR SEQ ID NO:
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LENGTH: 26 base pairs
TYPE: nucleic acid
                               COMPUTER READABLE FORM: MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                               APPLICANT: AxyS Pharmaceuticals, Inc.
TITLE OF INVENTION: Asthma Related Ge
NUMBER OF SEQUENCES: 339
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION: TELEPHONE: 512/418-3000
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ATTORNEY/AGENT INFORMATION:
NAME: Highlander, Steven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
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CITY: 1
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                                                                                                 COUNTRY: USA
ZIP: 94301
                                                                                                                                                                  STREET: 285 Ham:
CITY: Palo Alto
STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Match 49.3%;
Local Similarity 88.9%;
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TELEFAX: 512/474-7577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Highlander, Steven L. REGISTRATION NUMBER: 37,642 REFERENCE/DOCKET NUMBER: UT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: FILING DATE: Concur
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P.O. Box 4433
                                                                                                                                                                                                                                 285 Hamilton Ave, Suite 200
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Keller, Charles
Akande, Olanike
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Buolamwini, John
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IBM Compatible
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RESULT 8
US-08-256-368-14/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 14, Application US/0825636E Patent No. 5641649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 49.3%;
Best Local Similarity 88.9%;
             TELEX: 248345
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                        APPLICATION NUMBER: US/0
FILING DATE: 22-UUL-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Svensson, Leonard
                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 29 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: 650-327-3231
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APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
SEQUENCE CHARACTERISTICS
                                                          TELEPHONE: (703)205-8000
                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION:
                                           TELEFAX:
                                                                                                         NAME: Svensson, Leor
REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                       ZIP:
                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                                   STATE:
                                                                                                                                                                                                                                                                                                                                                  CITY: Falls Church
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
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                                                                                           REFERENCE/DOCKET NUMBER:
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                                                                                                                                                                                                                                                                                                                    Virginia
Y: U.S.A.
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                                                                                                                                                                                                                                                                                                                                                                 EE: Birch, Stewart, Kolasch & Birch 8110 Gatehouse Road, Suite 500 East
                                             (703)205-8050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Negro, Alessandro
Callegaro, Lanfranco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Stanchi, Ombretta
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                                                                                                                                                                                                                                                                                                                                                                                                                                  Expression Of Osteogenic Factor OP-1 In Cells Of Spodoptera Frugiperda Infected With Recombinant Baculovirus
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                                                                                             259-243P
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STRANDEDNESS:

single

nucleic acid

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В
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Best Local
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Best Local Similarity
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                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EARLIER APPLICATION NUMBER: PO3310 EARLIER FILING DATE: 1996-10-29 EARLIER APPLICATION NUMBER: PO4306 EARLIER FILING DATE: 1996-12-19 EARLIER APPLICATION NUMBER: PCT/AUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: A METHOD FOR PRODUCING, TITLE OF INVENTION: METHOD (AS Amended)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: RAMSHAW, JOHN A.M.
APPLICANT: WERKMEISTER, Jerome A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT FILING DATE: 1999-04-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EARLIER FILING DATE: 1997-10-29
NUMBER OF SEQ ID NOS: 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: VAUGHAN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE:
                                                                                                                                                                                             quence 2, Application US/07718490 tent No. 5340716
                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 41
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MOLECULE TYPE: other nucleic acid
DESCRIPTION: /desc = "PCR prime:
                                           CORRESPONDENCE ADDRESS:
                                                                        APPLICANT: Wagner, Daniel B.
TITLE OF INVENTION: Assay Method Utilizing
TITLE OF INVENTION: Chemiluminescent Label
                                                                                                                     APPLICANT:
                                                                                                                                                               APPLICANT:
                                                         NUMBER OF SEQUENCES:
                                                                                                                                   APPLICANT:
                                                                                                                                                   APPLICANT:
CITY: Palo Alto
              STREET:
                               ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/09/297,269
                                                                                                                                                                                                                                                                                      14 ACCTGGTGGACCTGGTGGACC 34
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                                                                                                                                                                                                                                                                                                                                                                Similarity
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              3401 Hillview Avenue
                                                                                                                     Pease, John S.
Daniloff, Yuri
                                                                                                                                                   Kirakossian,
                                                                                                                                                                  Ullman,
                                                                                                                                                                                                                                                                                                                                                  Conservative
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                                                                                                                                                                 Edwin F.
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Pred. No. 1.
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Pred. No. 1

    Mismatches

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LS USEFUL IN SAID
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                                                                                                                                                                                                                                                                                                                                                                     Patent No. 5340716
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                                                                                                                                           STREET: 340.
STREET: 340.
CITY: Palo Alto
CTATE: California
T S.A.
                                         CURRENT APPLICATION DATA:
                                                                                                                   COMPUTER READABLE FORM:
                                                                                                                                                                                                                                 APPLICANT: Wagner, Daniel B.
TITLE OF INVENTION: Assay Me
TITLE OF INVENTION: Chemilum
NUMBER OF SEQUENCES: 2
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ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Rel
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
                                                                   COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN: K12 DNAJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Leitereg, Theodore J. REGISTRATION NUMBER: 28,319
REFERENCE/DOCKET NUMBER: 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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                           APPLICATION NUMBER:
                                                          SOFTWARE:
                                                                                                  MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                       ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                             Pease,
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                                                                                                                                                                                                                                                                                                                                           Ullman,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                       PatentIn Release #1.0, Version #1.25
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                                                                                                                                                                                                       Syntex (U.S.A.) Inc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (415) 852-1091
415) 496-3529
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                                                                                                                                                                                        Hillview Avenue
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75.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
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ATTORNEY/AGENT INFORMATION:

Leitereg,

Theodore J

REGISTRATION NUMBER: 28,319
REFERENCE/DOCKET NUMBER: 27

27340/ DO-1557

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RESULT 12
US-08-471-496-7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: (415) 496-3529 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                INFORMATION FOR SEQ ID NO:
                                                                                                                                                              PRIOR APPLICATION NAME: WO PCT/US95/02645
APPLICATION NUMBER: WO PCT/US95/02645
FILING DATE: 01-MARTION:
ATTORNEY/AGENT INFORMATION:
NAME: STEFFE, ERIC K
                                                                                                                                                                                                                                                                                                                            ZIP: 20005-3934

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: LI, YI
APPLICANT: CAO, LIANG
APPLICANT: ROSEN, CRA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FRAGMENT TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION:
                                             SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ANTI-SENSE:
                                                                                                               TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE:
                                                                                                                                                                                                                                                   CLASSIFICATION:
                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08/471,496 FILING DATE: 06-JUN-1995
                                                                                                                              REGISTRATION NUMBER: 36, REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM:
                                                                              TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 50 base pairs
TYPE: NUCLEIC ACID
STRANDEDNESS: single
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE:
            TYPE: hucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7, Application US/08471496
5. 5798223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12 TGAAGCGGGCGAGCATGGCGCACC 35
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1100 NEW YORK AVENUE, SUITE 600
                                                                                                                                                                                                                                                                                                                                                                                                                    USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ROSEN, CRAIG
                                                                            (202) 371-2540
                                                                                                                                                                                                                                                                                                              PatentIn Release #1.0, Version #1.30
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                                                                                             (202) 371-2600
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HUMAN AMINE TRANSPORTER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      48.0%;
75.0%;
                                                                                                                                            36,688
                                                                                                                              1488.0830001
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Pred. No. 1.4e+03;
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                             RESULT 14
US-09-139-675-7
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                                                                                                                                                                                                     US-08-894-840-7
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Sequence 7, Application US/09139675A Patent No. 6117426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 19; Conserv
                                                                                                                                              Matches
                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                     TELEFAX: (202) 371-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/894,840
FILING DATE: "29-AUG-1997.
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                TELEPHONE: (202) 371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: HUMAN AMINE TRANSPORTER NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                    MOLECULE TYPE:
                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
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                                                                                                                                              Local Similarity hes 19; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. STREET: 1100 NEW YORK AVENUE, SUITE 600 CITY: WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: USA
ZIP: 20005-3934
                                                                                                                                                                                                                                STRANDEDNESS:
TOPOLOGY: lir
                                                                                                                                                                                                                                                                                                                                                                               NAME: STEFFE, ERIC REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: , Floppy disk
                                                                                                                                                                                                                                                                          LENGTH:
                                                                                      4 CAAGCTTGCCACCATGCTGCGGCCCAT 30
                                                                                                                 3 CAACCTGGCGAACATGGTGAACCCCAT 29
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                                                                                                                                                                                                                                            nucleic acid
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                                                                                                                                                                                                                                                                         34 base pairs
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CAO, LIANG
ROSEN, CRAIG A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                              Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IBM PC compatible YSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                    371-2540
                                                                                                                                                           47.3%;
70.4%;
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No. 1.6e+03;
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Pred. No. 1
                                                                                                                                            Mismatches
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                                                                                                                                                                         Length 34;
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                                                                                                                                              0;
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GENERAL INFORMATION:
APPLICANT: Li, Yi
APPLICANT: Cao, Liang
APPLICANT: ROSen, Craig
TITLE OF INVENTION: Human Amine Transporter
FILE REFERENCE: 1488.0830003

CURRENT APPLICATION NUMBER: US/09/139,675A

SOFTWARE: PatentIn Ver. 2.0 SEQ ID NO 7

EARLIER FILING DATE: 1995-06-06 NUMBER OF SEQ ID NOS: 9

EARLIER APPLICATION NUMBER: WO PCT/US95/02645
EARLIER FILING DATE: 1995-03-01
EARLIER APPLICATION NUMBER: US 08/471,496

CURRENT FILING DATE: 1998-08-25

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TOPOLOGY:
US-08-853-774-11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 34
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-139-675-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 70.4
Percent 19; Conservative
                                                                                                                                                                                                     APPLICATE:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Altman, Daniel E
REGISTRATION NUMBER: 34,115
REFERENCE/DOCKET NUMBER: LOMA:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION 140/760-0404
 Query Match 46.7%;
Best Local Similarity 77.3%;
Matches 17; Conservative
                                                                                    INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 28 base pairs
TYPB: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Diamond, David
APPLICANT: Nehlsen-Cannarella, Sandra
APPLICANT: Fagoaga, Omar
APPLICANT: Szalay, Aladar
TITLE OF INVENTION: ABO HISTO-BLOOD GROUP O ALLELES OF THE BABOON
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
ADDRESSEE: Knobbe, Martan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       equence 11, Application US/08853774
atent No. 6265557
                                                                                                                                                                                                                                                                                                                                                                                                                              OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                         FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: US
ZIP: 92660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: Knobbe, Martens, Olson & Bear STREET: 620 Newport Center Drive Sixteenth Flo CITY: Newport Beach
                                                                                                                                                                                          TELEPHONE: 714/760-9503
                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM Compatible OPERATING SYSTEM: DOS
                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4 CAAGCTTGCCACCATGCTGCGGCCCAT 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3 CAACCTGGCGAACATGGTGAACCCCAT 29
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Score 14; DB 4; Le
Pred. No. 1.9e+03;
0; Mismatches 5;
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Pred. No. 1.6e+03;
0; Mismatches 8;
                                 Length 28;
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   0;
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 Gaps
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 0;
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8 TGGCGAACATGGTGAACCCCAT 29

5 TGGCAAACACAGTTAACCCAAT 26

В

Search completed: June 22, 2003, 00:01:32 Job time: 36.625 secs

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Post-processing: Minimum Match
Maximum Match
Listing first
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Maximum DB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Scoring table:
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15
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                                                                                                                                                                                                                                                                                                                                                                                 June 21, 2003, 22:26:37; Search time 88.5938 Seconds (without alignments) 496.907 Million cell updates/sec
                                                                                                                                                                                                                                                              Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Published_Applications_NA:*

1: /cgn2_6/ptodata/2/pubpna.

2: /cgn2_6/ptodata/2/pubpna.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1042519 seqs, 733713590 residues
     100
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compus
                                                                                                                                                                                                                                                                                                                                                                             /cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*
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/cgn2_6/ptodata/2/pubpna/US09_ENEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US09_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US10_NEW_PUB.seq:*
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/cgn2_6/ptodata/2/pubpna/US10_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US60_NEW_PUB.seq:*
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/cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US06_PUBCOMB.seq:*
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/cgn2_6/ptodata/2/pubpna/PCTUS_PUBCOMB.seq:*
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/cgn2_6/ptodata/2/pubpna/PCT_NEW_PUB.seq:*
     DΒ
      1 0%
1 100%
45 summaries
                         0 US-09-885-441-35

US-10-123-170-17

0 US-09-752-983-259

0 US-09-800-631-32

0 US-09-801-274-1110

US-09-877-478-6391

US-09-877-478-4044

US-10-098-2638-8701

US-10-239-804-36

US-10-239-804-36
                                                                                                                                                       0 US-09-964-666-11
0 US-09-964-412-11
US-09-860-670-23
US-10-085-906-77
US-09-530-139-69
US-09-530-139-70
                                                                                                                                                                                                                                      US-09-964-667-11
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                                                                                                                                                                                                                                                                                                     SUMMARIES
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Sequence 11, Appl
Sequence 11, Appl
Sequence 233, Appl
Sequence 233, Appl
Sequence 77, Appl
Sequence 70, Appl
Sequence 70, Appl
Sequence 35, Appl
Sequence 259, Appl
Sequence 259, Appl
Sequence 6391, Ap
Sequence 6391, Ap
Sequence 64044, Appl
Sequence 8701, Ap
Sequence 36, Appl
Sequence 37, Appl
Sequence 38, Appl
Sequence 37, Appl
Sequence 38, Appl
Sequence 38, Appl
Sequence 148, Appl
Sequence 55, Appl
                                                                                                                                                                                                                                                             Description
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| 45                 | 44                  | 43                  | 42                | 41                 | 40                  | 39                | 38                | 37                | 36              | 35                 | 34                 | ω<br>ω           | 32                | 31               | 30                   | 29                 | 28                 | 27                 | 26                  | 25                  | 24                | 23                | 22                | 21                  | 20                |
|--------------------|---------------------|---------------------|-------------------|--------------------|---------------------|-------------------|-------------------|-------------------|-----------------|--------------------|--------------------|------------------|-------------------|------------------|----------------------|--------------------|--------------------|--------------------|---------------------|---------------------|-------------------|-------------------|-------------------|---------------------|-------------------|
|                    | 13.6                | •                   |                   |                    | •                   |                   | •                 |                   | •               | •                  |                    |                  | •                 | 14               | 14                   | 14                 | 14.2               | 14.2               | 14.2                | 14.2                | 14.2              | 14.2              | 14.2              | 14.4                | 14.6              |
| 45.3               | 45.3                | 45.3                | 45.3              | 45.3               | 45.3                | 45.3              | 45.3              | 45.3              | 46.0            | 46.0               | 46.0               | 46.0             | 46.0              | 46.7             | 46.7                 | 46.7               | 47.3               | 47.3               | 47.3                | 47.3                | 47.3              | 47.3              | 47.3              | 48.0                | 48.7              |
| 37                 | 37                  | 37                  | ω<br>ω            | 31                 | 30                  | 30                | 23                | 20                | 46              | 37                 | 37                 | 25               | 20                | 30               | 25                   | 24                 | 37                 | 37                 | 37                  | 37                  | 34                | 31                | 30                | 37                  | 30                |
| œ                  | 9                   | ဖ                   | 9                 | 10                 | 9                   | 9                 | 10                | 9                 | 9               | 9                  | 9                  | 9                | 9                 | 9                | 9                    | 9                  | 9                  | 9                  | 9                   | 9                   | 10                | 9                 | 10                | 10                  | 9                 |
| US-09-877-478-4115 | US-09-780-533A-4376 | US-09-730-289B-2710 | US-10-155-233-10  | US-09-801-274-1365 | US-09-864-636A-1614 | US-10-085-906-44  | US-09-529-063-86  | US-10-085-906-365 | US-10-146-938-1 | US-09-930-423-2860 | US-09-930-423-2785 | US-10-192-926-18 | US-10-025-201-13  | US-09-832-292-24 | US-10-098-263B-25783 | US-09-940-185-2688 | US-09-930-423-2915 | US-09-877-478-4122 | US-09-780-533A-4387 | US-09-780-533A-4302 | US-09-987-025-12  | US-09-924-125-4   | US-09-964-277-15  | ) US-09-755-665-108 | US-10-085-906-241 |
| Sequence 4115, Ap  | Sequence 4376, Ap   | Sequence 2710, Ap   | Sequence 10, Appl | Sequence 1365, Ap  | Sequence 1614, Ap   | Sequence 44, Appl | Sequence 86, Appl | Sequence 365, App |                 | Sequence 2860, Ap  |                    |                  | Sequence 13, Appl |                  | Sequence 25783, A    | 2688,              | 2915,              | 4122,              | Sequence 4387, Ap   |                     | Sequence 12, Appl | Sequence 4, Appli | Sequence 15, Appl | ς.                  | Sequence 241, App |

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## ALIGNMENTS

RESULT 1 US-09-964-667-11

Sequence 11, Application US/09964667 Publication No. US20030033621A1 GENERAL INFORMATION:

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INFORMATION FOR SEQ ID NO: 11: SEQUENCE CHARACTERISTICS:
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COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF CONTROL OF THE STATE 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Esmond, Robert W.
RECISTRATION NUMBER: 32,893
REFERENCE/DOCKET NUMBER: 06
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
TOPOLOGY: linear
MOLECULE TYPE: cDNA
SEQUENCE DESCRIPTION: SEQ ID NO: 11:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: Transgenic Animals and Cell Lines Screening Drugs Effective for the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: de la Monte, S
Wands, Jack R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 14
                                                                                                                                                                           TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/09/964,667 FILING DATE: 28-Sep-2001 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: 1100 New CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE: 202-371-260
TELEFAX: 202-371-2540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: USA
                                                                                                                                                                                                                                                                                                LENGTH: 30 base pairs
                                                                                                                                                                                                                                                                                                                                                       CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of Alzheimer's Disease
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Treatment
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of Alzheimer's Disease

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                                                                                                                                             RESULT 3
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US-09-964-666-11
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                                                                     Sequence 11, Application US/09964412 Patent No. US20020129391A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patent No. US20020104108A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 11, Application US/09964666
                                                                                                                                                                                                                                                                Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO: 11: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local
TITLE OF INVENTION: Transgenic Animals and Cell Lines for Screening Drugs Effective for the Treatment or Prevention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
NAME: Esmond, Robert W.
REGISTRATION NUMBER: 32,893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                              SEQUENCE DESCRIPTION: SEQ ID NO: 11:
                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear MOLECULE TYPE: cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: 0609.4370000 TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: Transgenic Animals and Cell Lines for Screening Drugs Effective for the Treatment or Prevention
                                                                                                                                                                                                            1 ATCAACCTGGCGAACATGGTGAACCCCCATC 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/09/964,666
FILING DATE: 28-Sep-2001
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 30 base pairs TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: 202-371-2600
TELEFAX: 202-371-2540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STATE: DC
                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS: single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: Sterne, Kessler, Goldstein & Fox, P.L.L.C. STREET: 1100 New York Ave., Suite 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 20005-3934
                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
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Wands, Jack R.
                                           de la Monte, Suzanne
Wands, Jack R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 30; DB 9; 100.0%; Pred. No. 0.00063;
                                                                                                                                                                                                                                                                              100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of Alzheimer's Disease
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                                                                                                                                                                                                                                                                              Score 30; DB 10;
Pred. No. 0.00063;
                                                                                                                                                                                                                                                              Mismatches
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        RESULT 5
                                                                                                                         Matches
                                                                                                                                          Best Local
                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 233,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                          TYPE: DNA
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; ORGANISM: Homo sapiens US-09-860-670-233
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                                                                                                                                                                                                           Prior application data removed - consult PALM or file wrapper NUMBER OF SEQ ID NOS: 289
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 233
LENGTH: 49
TYPE: 1.14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: Nucleic Acids, Proteins, FILE REFERENCE: PA127P1
CURRENT APPLICATION NUMBER: US/09/860,670
CURRENT FILING DATE: 2001-05-21
                                                                                                                                                                                                                                                                                                                                                                                                                                  Patent No. US20020165137A1
                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Ruben et al
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: 0609.4370000
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO: 11:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DDS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/964,412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 20005-3934

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compati
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear MOLECULE TYPE: cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: <Unknown> ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein & Fox, P.L.L.C.
STREET: 1100 New York Ave., Suite 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE DESCRIPTION: SEQ ID NO: 11:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
16 ACCATCCTGGCTAAAATGGTGAAACCC 42
                  ·1 ATCAACCTGGCGAACATGGTGAACCCC 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 ATCAACCTGGCGAACATGGTGAACCCCCATC 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 ATCAACCTGGCGAACATGGTGAACCCCATC
                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 30 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Esmond, Robert W. REGISTRATION NUMBER: 32,893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/09860670
                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%;
                                                                                              63.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-Sep-2001
                                                                                                Pred. No.
                                                                                                                Score 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 30; DB 10; Pred. No. 0.00063;
                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                DB 9;
                                                                                                                                                                                                                                                                                                                                                                         and Antibodies
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                                                                                                                Length 49;
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Query Match
Best Local Similarity
Thes 18; Conserve
RESULT 7
US-09-530-139:70
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                                                                                                            QΥ
                                                                                                                                                                                                                             ; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-530-139-69
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TYPE: DNA; ORGANISM: Homo sapiens US-10-085-906-77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         us-09-530-139-69/c
                                                                                                                                                                 Query Match
Best Local Similarity
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Publication No.
                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 77
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/10/085,906
CURRENT FILING DATE: 2002-02-27
PRIOR APPLICATION NUMBER: US 60/126,215
PRIOR FILING DATE: 1999-03-25
PRIOR APPLICATION NUMBER: US 09/534,061
PRIOR FILING DATE: 2000-03-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Gray, Gary S.

TITLE OF INVENTION: COSTIMULATORY RECEPTOR LOCUS AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Ying, Vin APPLICANT: Wu, Paul APPLICANT: Gray, Ga
                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: EP 97308538.4
PRIOR FILING DATE: 1997-10-27
NUMBER OF SEQ ID NOS: 77
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: VAN DER LOGT, CORNELIS PAUL TITLE OF INVENTION: MULTIVALENT ANTIGEN-BINDING PROTEINS FILE REFERENCE: 60113/268075/ASH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: FRENKEN, LEON GERARDUS APPLICANT: HOWELL, STEVEN
                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: PCT/EP98/0699: PRIOR FILING DATE: 1998-10-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/09/530,139
CURRENT FILING DATE: 2000-04-27
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: PCT/US00/07938 PRIOR FILING DATE: 2000-03-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: GNN-5343CP2
                                                                                                                                                                                                                                                                                                        TYPE: DNA
                                                                                                                                                                                                                                                                                ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 30
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                                                                          ACCTGGTGAACCTGGAGAACCAC 4
                                                                                                              ACCTGGCGAACATGGTGAACCCC 27
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Application US/09530139
                                                                                                                                                    Conservative
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90.0%;
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82.6%;
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Pred. No. 3.7e+02;
0; Mismatches 2;
                                                                                                                                                                   Score 16.6; DB 9;
Pred. No. 4.5e+02;
                                                                                                                                                    Mismatches
                                                                                                                                                                                     DB 9;
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US-09-885-441-35/c
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                                                                              Matches
                                                                                                                                                                                                                                      SEQ ID NO 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION: APPLICANT: Xiao, Yo
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Patent No. US20020146407A1
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Best Local Similarity 85.7%;
                                                                                                Best Local
                                                                                                                Query Match
                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: PCT/
PRIOR FILING DATE: 2001-06-20
NUMBER OF SEQ ID NOS: 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: Regulation of Human Eosinophil Serine TITLE OF INVENTION: Protease-1-Like Enzyme FILE REFERENCE: 04974.00512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US//9/530,139
CURRENT FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: PCT/EP98/06991
PRIOR FILING DATE: 1998-10-27
PRIOR APPLICATION NUMBER: EP 97308538.4
PRIOR FILING DATE: 1997-10-27
NUMBER OF SEQ ID NOS: 77
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APPLICANT: VAN DER LOGT, CORNELIS PAUL
TITLE OF INVENTION: MULTIVALENT ANTIGEN-BINDING PROTEINS
FILE REFERENCE: 60113/268075/ASH
                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: US 60/244,171
PRIOR FILING DATE: 2000-10-31
PRIOR APPLICATION NUMBER: US 60/279,766
PRIOR FILING DATE: 2001-03-30
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                                                                                                                                                                                               LENGTH: 24
TYPE: DNA
                                                                                                                                                                                                                                                        SOFTWARE: FastSEQ for Windows Version 4.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/885,441
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                                       7 CTGGCGAACATGGTGAACCCC 27
                                                                                              Similarity
CTGGTCAACATGGTGAAACCC
                                                                              Conservative
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                                                                                              54.0%;
85.7%;
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                                                                                              Score 16.2; DB 10
Pred. No. 6.5e+02;
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Pred. No. 6.5e+02;
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                                                                                                              Length 24;
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RESULT 9
US-10-123-170-17
; Sequence 17, Application US/10123170

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US-09-752-983-259
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: 221283US0
CURRENT APPLICATION NUMBER: US/10/123,170
CURRENT FILING DATE: 2002-04-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT FILING DATE: 2002-04-17
PRIOR APPLICATION NUMBER: 60/283,957
PRIOR FILING DATE: 2001-04-17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
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                             TELEFAX: 609-810-1454
NFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
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                                                                              REFERENCE/DOCKET NUMBER: 32,257
REFERENCE/DOCKET NUMBER: ISI
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-810-1515
TELEPHONE: 609-810-1515
                                                                                                                                                                                                                                                                                                      OPERATING SYSTEM: WINDOWS SOFTWARE: WORDPERFECT 6.0 CURRENT APPLICATION DATA:
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                                                                                                                                                                          APPLICATION NUMBER: 09/2:
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
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MEDIUM TYPE: DISKETT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                        APPLICATION NUMBER: FILING DATE: 02-Jan
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nes 19; Conserv
                                                                                                                                                                                                                                                       CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
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                  ENGTH:
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Nucleic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          66 East Main Street
                                                                                                                                                                                                                                                                                                                                                                                                                                     U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Graham, Brett P. Monia
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79.2%;
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                                                               ; ORGANISM: Homo sapiens US-09-801-274-1110
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US-09-800-631-32/c
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SEQ ID NO. 32
LENGTH: 20
TYPP: "..."
                                                                                                                             SEQ ID NO 1110
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 Matches
                               Query Match
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Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                         PRIOR APPLICATION NUMBER: US 60/206,129
PRIOR FILING DATE: 2000-05-22
NUMBER OF SEQ ID NOS: 1802
                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/801,274
CURRENT FILING DATE: 2001-03-07
CURRENT APPLICATION NUMBER: US 60/187,510
                                                                                                                                                                                                                                                                     APPLICANT: Ireland, James S.
APPLICANT: Lander, Eric S.
TITLE OF INVENTION: HUMAN SINGLE NUCLEOTIDE
FILE REFERENCE: 2825.2009-001
                                                                                                                                             SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                        APPLICANT: Cargill, Michele
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CURRENT FILING DATE: 2001-03-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: JACQUELINE WYALL TITLE OF INVENTION OF BH3 INTERACTING DOMAIN DEATH AGONIST FILE REFERENCE: ISPH-0544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Hong Zhang APPLICANT: Jacquelin
                                                                                                                                                                                                           PRIOR FILING DATE: 2000-03-07
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TYPE: DNA
                                                                                               TYPE: DNA
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TOPOLOGY: Li
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Score 15.2; D
Pred. No. 1.8e
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Pred. No. 1
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Pred. No. 1.7e+03;
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RESULT 14
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Best Local
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CURRENT APPLICATION NUMBER: US/09/877,478
CURRENT FILING DATE: 2001-12-31
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OTHER INFORMATION: 2'-0-Methyl
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OTHER INFORMATION: Phosphorothioate
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Blatt, Larry
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Morrissey, Dave
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US-10-098-263B-8701
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                                                                                 US-10-098-263B-8701
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                                                                                                                  CURRENT APPLICATION NUMBER: US/10/098,263B
CURRENT FILING DATE: 2003-01-08
PRIOR APPLICATION NUMBER: 60/276,759
PRIOR FILING DATE: 2001-03-16
NUMBER OF SEQ ID NOS: 131066
SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
SEQ ID NO 8701
LENGTH: 25
TYPE: DNA
    Best Local Similarity
Matches 18; Conser
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TITLE OF INVENTION: Human Microarray
FILE REFERENCE: 3118.1
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APPLICANT: McSwiggen, Jim
APPLICANT: Morrissey, Dave
TITLE OF INVENTION: Method and Reagent for Inhibiting Hepatitis B Virus
FILE REFERENCE: MBHB00-845-H (400/029)
CURRENT APPLICATION NUMBER: US/09/877,478
CURRENT FILING DATE: 2001-12-31
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PRIOR FILING DATE: 2000-10-24
PRIOR APPLICATION NUMBER: US 08/193,627
PRIOR FILING DATE: 1994-02-07
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                                                                                                  ORGANISM: Homo sapien
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APPLICATION NUMBER: US 08/434,504
FILING DATE: 1995-05-04
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Search completed: June 22, 2003, 03:18:19 Job time: 91.5938 secs

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                                                                                                                        AUTHORS
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Email: ysuzuki@ims.u-tokyo.ac.jp
Suzuki,Y., Yoshitomo-NaKagawa,K., Maruyama,K., Suyama,A. and Sugano
,S. Construction and characterization of a full length-enriched and
a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).
Location/Qualifiers
                                       Contact: Yutaka Suzuki
Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
                                                                                              , Y., Nakamura, Y., Suyama, A. and Sugano, S. Diverse transcriptional initiation revealed
                                                                                                                                                                                                      AU105733 Sugano Homo sapiens
                                                                                                              Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okub
                                                                                                                                      Mammalia;
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EMBO Rep. 2 (5), 388-393 (2001)
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Okubo,K., Saka

Hata

large-scale

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RESULT 3
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N80349 33 bp mRNA linear EST 02-APR-1996 zal3cl2.rl Soares fetal liver spleen lNFLS Homo sapiens cDNA clone IMAGE:292438 5' similar to gb|Ll3704|HUMSCALUB Human scRNA molecule transcribed from Alu (rRNA); gb:X53795_rnal INDUCIBLE MEMBRANE
                                                                                                                                      1 ATCAACCTGGCGAACATGGTGAACCC
                                                                                                                                                                                                                                                                                                                                                                                         Email: ysuzuki@ims.u-tokyo.ac.jp
Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and Sugano,S. Construction and characterization of a full length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: Yutaka Suzuki
Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Jap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites EMBO Rep. 2 (5), 388-393 (2001)
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Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J., Hat, Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K., Sakaki,Y., Nakamura,Y., Suyama,A. and Sugano,S.
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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/note="Differential display comparison of untreated
dimethylfumarate treated U937 cells"
a 10 c 12 g 14 t
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/note="Differential display comparison of untreated dimethylfumarate treated U937 cells"
7 c 15 g 21 t
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/db_xref="taxon:9606"
/clone="LNG05691"
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/clone="COL01940"
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33 CATCCTGGCTAACATGGTGAANCCC
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Eukaryota; Metazoa: Chordata: Craniata; Vertebrata; Eu
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; H
1 (bases 1 to 50)
Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J.,
H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubc,Y., Nakamura,Y., Suyama,A. and Sugano,S.
                                                                                                                                                                                                                                                                                                                                    3 CAACCTGGCGAACATGGTGAACCCC
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                                                                                                                                                                                          COLF1341, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: est@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unpublished (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4444 Forest Park Parkway, Box 8501, St. Louis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Washington University School of Medicine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Wilson RK
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                                                                                                                                                                                                     Sugano Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (Pharmacia), digested with Pac I and cloned into the Pac I and Eco RI sites of the modified pT7T3 vector. Library
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/clone="IMAGE:292438"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /dev_stage="20 week-post conception fetus"
/lab_host="DH10B (ampicillin resistant)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /clone_lib="Soares fetal.liver spleen lNfLS'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /db_xref="GDB:3800215"
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88.0%;
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Pred. No. 1
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1.4e+02;
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                   Okubo, K., Sak
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                                                                                                                                                                                                                                                                                       Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and Sugano,S. Construction and characterization of a full length-enriched and a 5'-end-enriched convalibrary. Gene 200 (1-2), 149-156 (1997).
                                                                                                                                                                                                                                                                                                                                                                              Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedal, Minatoku, Tokyo 108-8639, Jaj
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Y., Nakamura,Y., Suyama,A. and Sugano,S.

Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites
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Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and Sugano,S. Construction and characterization of a full length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J., Ha, Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K., Sakaki,Y., Nakamura,Y., Suyama,A. and Sugano,S.
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AU105702 Sugano Homo sapiens
HRC11393, mRNA sequence.
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Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Ja
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mapping of EMBO Rep. 3
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AU105702.1 GI:13555223
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Yutaka Suzuki
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                                                                                                                                                                                                                                                                                                                                                                ysuzuki@ims.u-tokyo.ac.
                                                                                  /clone_lib="9ugano Homo sapiens cDNA library"
/note="Differential display comparison of unt-
dimethylfumarate treated U937 cells"
a 16 c 12 g 9 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /clone_lib="Sugano Homo sapiens cDNA library"
/note="Differential display comparison of untreated
dimethylfumarate treated U937 cells"
/note="Differential display comparison of untreated
dimethylfumarate treated U937 cells"
/note="Differential display comparison of untreated
dimethylfumarate treated U937 cells"
                                                                                                                                                                                  /clone="HRC11393"
                                                                                                                                                                                                     /organism="Homo sapiens"
/db_xref="taxon:9606"
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/db_xref="taxon:9606"
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14 ACCAGCCTGGCCAACATGGTGAAACCC
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Tissue Procurement: David G. Bostwick, M.D., Rodr
M.D., Michael R. Emmert-Buck, M.D., Ph.D.
CDNA Library Preparation: David B. Krizman, Ph.D.
CDNA Library Arrayed by: Greg Lennon, Ph.D.
DNA Sequencing by: Washington University Genome
Clone distribution: NCI-CGAP clone distribution
found through the I.M.A.G.E. Consortium/LLNL at:
                   AU103189
AU103189 Sugano Homo sap
HRC04023, mRNA sequence
AU103189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AA492220

44 bp mRNA linear EST 19-A ng79a04.sl NCI_CGAP_Pr6 Homo sapiens cDNA clone IMAGE:940974 similar to gb:M91159 !!!! ALU CLASS E WARNING ENTRY !!!! (HU
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NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy
AU103189.1
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                                                  Sugano Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                     /note="Vector: pAMP10; mRNA made from prostatic intraepithelial neoplasia.(low-grade), cDNA made boligo-dT priming. Non-directionally cloned. Size-selected on agarose gel, average insert size Reference: Krizman et al. (1996) Cancer Research
                                                                                                                                                                                                                                                                                                                                      56:5380-5383."
14 c
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/clone="IMAGE:940974"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /tissue_type="prostate"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /clone_lib="NCI_CGAP_Pr6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ∕organism="Homo sapiens"
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 GI:13552710
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                                                      library Homo sapiens cDNA
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                  Email: est@watson.wustl.edu
High qality sequence starts: 1
High qality sequence stops: 1
                                                                                                                                                                                                                                                          Hillier, L., Lennon, G., Becker, M., Bonaldo, M.F., Chiapelli, B., Chissoe, S., Dietrich, N., DuBuque, T., Favello, A., Gish, W., Hawkins, M., Hultman, M., Kucaba, T., Lacy, M., Le, M., Le, N., Mardis, E., Moore, B., Morris, M., Parsons, J., Prange, C., Rifkin, L., Rohlfing, T., Schellenberg, K., Soares, M.B., Tan, F., Thierry Meg, J., Trevaskis, E., Underwood, K., Wohldmann, P., Waterston, R., Wilson, R. and Marra, M. Generation and analysis of 280,000 human expressed sequence tags
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: ysuzuki@ims.u-tokyo.ac.jp
Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and Sugano
,S. Construction and characterization of a full length-enriched and
a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).
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Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J., Hat,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K., Sakaki,Y., Nakamura,Y., Suyama,A. and Sugano,S.
Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites
EMBO Rep. 2 (5), 388-393 (2001)
  Source:
                                                                                      Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                             Washington University School of Medicine 4444 Forest Park Parkway, Box 8501, St. Louis,
                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 33)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 T53436 33 bp mRNA linear EST 06-FEB-1
Ya89al0.sl Stratagene placenta (#937225) Homo sapiens cDNA clone
IMAGE:68826 3′ similar to similar to gb:M87338 ACTIVATOR 1 40 KD
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Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
                                                                                                                                                                          Other_ESTs: ya89a10.rl
Contact: Wilson RK
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  IMAGE
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/note="Differential display comparison of untreated
dimethy.lfumarate treated U937 cells"
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/db_xref="taxon:9606"
/clone="HRC04023"
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88.0%;
Consortium, LLNL
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Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Suganc,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Y., Nakamura,Y., Suyama,A. and Sugano,S.
Diverse transcriptional initiation revealed by fi mapping of mRNA start sites
EMBO Rep. 2 (5), 388-393 (2001)
21270072
                                                                                                                                                                                                                                                            Department of Virology
Institute of Medical Science, University of Tokyo
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Email: ysuzukileims.u-tokyo.ac.jp
Email: ysuzukileims.u-tokyo.ac.jp
Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A.
Szuzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A.
Szuzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A.
Szuzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A.
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COL07268, mRNA sequence
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae
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                    Similarity
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                                                                                    /clone="COL07268"
/clone_lib="Sugano Homo sapiens cDNA library"
/clone_lib="Sugano Homo sapiens cDNA library"
/note="Poliferential display comparison of untreated and dimethylfumarate treated U937 cells"
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/db_xref="GDB:489723"
/db_xref="taxon:9606"
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/db_xref="taxon:9606"
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                63.3%;
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                  Score 19;
Pred. No.
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7.3e+02;
DB 9; Length 50;
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AU102525 Sugano Homo sap.
CCL08447, mRNA sequence.
AU102525
AU102525.1 GI:13552045
EST.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 50)
Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J., Hat,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K., Sakaki,Y., Nakamura,Y., Suyama,A. and Sugano,S.
Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites
EMBO Rep. 2 (5), 388-393 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Yutaka Suzuki
Contact: Yutaka Suzuki
Department of Virology
Institute of Medical Science, University of Tokyo
A-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Email: ysuzuki@ims.u-tokyo.ac.jp
Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and Sugano,S. Construction and characterization of a full length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).
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Diverse transcriptional initiation revealed by fine, large-scale
                                                                                                                                                                                         HRC07143, mRNA sequence
AU102529
AU102529.1 GI:13552049
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EMBO Rep. 2 (5), 388-393 (2001)
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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/note="Differential display comparison of untreated
dimethylfumarate treated U937 cells"
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    . Similarity.
22; Conserv
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                                                                                                                                                                                                                                                                                                                                                                          Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Email: ysuzuki@ims.u-tokyo.ac.jp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J.,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K., Sak
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Eukaryota; Metazoa;
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/note="Differential display comparison of unt
dimethylfumarate treated U937 cells"
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Score 19; DB 9; Le
Pred. No. 8.3e+02;
^ **smatches 5;
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Pred. No. 8.3e+02
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                           Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J.,
H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,Y., Nakamura,Y., Suyama,A. and Sugano,S.
Diverse transcriptional initiation revealed by fine, I mapping of mRNA start sites
EMBO Rep. 2 (5), 388-393 (2001)
                                                                                                          Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 50)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Email ysuzuki@ims.u-tokyo.ac.jp
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Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites
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/note="Differential display comparison of untreated and
dimethylfumarate treated U937 cells"
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   Yutaka Suzuki
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/db_xref="taxon:9606"
/clone="NBLAN362NF"
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Contact: Yutaka Suzuki
Department of Virology
Institute of Medical Science, University of Tokyo
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
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Email: ysuzuki@ims.u-tokyo.ac.jp
Email: ysuzuki@ims.u-tokyo.ac.jp
Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and
Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama, T., Junier, 1997
                   1 ATCAACCTGGCGAACATGGTGAACCCC
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Institute of Medical Science, University of Tokyo
1nstitute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Email: ysuzuki@ims.u-tokyo.ac.jp
Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and Sugano
S. Construction and characterization of a full length-enriched and
a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).
                                                                                                                                                                                                                                                                                                                                                                      ,S. Construction and characterization of a full length-enriched a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).
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,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,Y., Nakamura,Y., Suyama,A. and Sugano,S.
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1 (bases 1 to 25)
Watson, J.D. and Rudert, F.
CD95 regulatory gene sequences
Patent: US 5912168-A 23 15-JUN-1999;

Location/Qualifiers

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score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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Mulvihill, E.R., Nexo, B.A., Yoshitake, S.,
Hashimoto, A. and Yuzuriha, T.
Mutant t-PA with kringle replacement
Patent: EP 0293934-Al 33 07-DEC-1988;
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106372
                                                                                                                                  1 (bases 1 to 20)
Dean, N.M. and Cowsert, L.M.
Antisense inhibition of HPK/GCK-like kinase expression
Patent: US 6346416-A 29 12-FEB-2002;
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AR154129
1 (bases 1 to 36)
Griffiths, A. David., William
Nissim, A., Winter, G. Paul.,
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Griffiths, A. David., Williams, S. Cameron., Wate
Nissim, A., Winter, G. Paul., Johnson, K. Stuart.
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Yeh,H.R. and Wick,C.H.
Yeh,H.R. and wick,C.H.
Detector for nucleic acid typing and methods of using the same
Patent: US 6238866-A 7 29-MAY-2001;
Location/Qualifiers
                                   Unclassified
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Patent: US 5962255-A 83 05-OCT-1999;
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             Williams, S. Cameron.,
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                                                                                              1 (bases 1 to 36) Johnson, K. Stuart., Winter, G. Paul., Griffiths, A. David., Smith, A. John. Hammond. and Waterhouse, P. Michael. Methods for producing members of specific binding pairs Patent: US 5733743-A 37 31-MAR-1998; Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                     1 (bases 1 to 36)
Johnson, K. Stuart., Winter, G. Paul., Griffiths, A. David.,
Smith, A. John. Hammond. and Waterhouse, P. Michael.
Methods for producing members of specific binding pair.
Patent: US 6140471-A 37 31-OCT-2000;
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37 from patent US 5733743.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Barany, F., Zirvi, M., Gerry, N.P., Favis, R. and Kliman, R. Method of designing addressable array for detection of sequence differences using ligase detection reaction Patent: WO 0179548-A 5922 25-OCT-2001; CORNELL RESEARCH FOUNDATION, INC. (US)
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/db_xref="taxon:32630"
/note="Hypothetical Probe Sequence"
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AX292123
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Query Match
Best Local Similarity 78.
Matches 11; Conservative
                                                          1 (bases 1 to 18)
Borden, P.Ann. and Heller, R.Anand.
Borden, P.Ann. and Heller, R.Anand.
Methods for measuring stromelysin-1 promoter activity
Patent: US 6338944-A 2 15-JAN-2002;
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Borden, P.Ann. and Heller, R. Anand.
Human stromelysin-1 promoter
Patent: US 5824794-A 2 20-OCT-1998;
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Obesity associated biallelic marker maps
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae
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            /organism="unknown"
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Query Match 74.3%; Score 10.4; DB 6; Length 18;
Best Local Similarity 84.6%; Pred. No. 8.9e+04;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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Search completed: June 21, 2003, 22:14:35

Job time : 284.094 secs
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Maximum Match
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Maximum DB seq length: 50
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being prinand is derived by analysis of the total score distribution.
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                                                                                                         SIDS2/gcgdata/geneseq/geneseqn-emb1/NA1986_DAT: *

(SIDS2/gcgdata/geneseq/geneseqn-emb1/NA1986_DAT: *

(SIDS2/gcgdata/geneseq/geneseqn-emb1/NA1980_DAT: *

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(SIDS2/gcgdata/geneseq/geneseqn-emb1/NA1992_DAT: *

(SIDS2/gcgdata/geneseq/geneseqn-emb1/NA1993_DAT: *

(SIDS2/gcgdata/geneseq/geneseqn-emb1/NA1995_DAT: *

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Copyright (c) 1993 - 2003 Compus
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/SIDS2/gcgdata/geneseq/geneseqn-embl/NA1981.DAT:*
/SIDS2/gcgdata/geneseq/geneseq-embl/NA1982.DAT:*
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/SIDS2/gcgdata/geneseq/geneseqn-embl/NA1985.DAT:*
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|--------------------|--------------------|--------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------------|---|
| 11.4               | 11.4               | 11.4               | 11.4              | 11.4               | 11.4               | 11.4               | 13                 | 13                 | Score                    |   |
| 81.4               | 81.4               | 81.4               | 81.4              | . 81.4             | 81.4               | 81.4               | 92.9               | 92.9               | Query<br>Match           | æ |
| 41                 | 36                 | 31                 | 27                | 27                 | 22                 | 20                 | 27                 | 25                 | Query<br>Match Length DB |   |
| 22                 | 14                 | 22                 | 9                 | 9                  | 22                 | 24                 | 20                 | 19                 | DB                       |   |
| AAH46243           | AAQ49016           | AAS04026           | AAN82045          | AAN81248           | AAS03611           | ABK44429           | AAX84455           | AAV23155           | DB ID.                   |   |
| Human neuronal thr | Multimeric (SBP) a | VNTR hybridisation | Probe O-YNH24 for | Probe 0-YNH24 to i | PCR primer rend9bl | Human HPK/GCK-like | PCR primer for BCN | Primer -1299/-1/CA | Description              |   |

## ALIGNMENTS

RESULT 1 AAV23155/c ID AAV23155 standard; DNA; 25

₿P

AAV23155;

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CD95; regulatory region; silencer; enhancer; apoptosis; inhibitor; cancer; viral infection; neurodegeneration; autoimmune disease; human; gene therapy; transcription factor; PCR primer; ss.
                                                                                                                                                                          Synthetic
New regulatory regions from the CD95 gene and transcription factors
                    WPI; 1998-179445/16.
                                       Rudert F,
                                                                                                  29-AUG-1997;
                                                                                                                       05-MAR-1998.
                                                                                                                                           WO9808965-A2
                                                                                                                                                                                                                                     Primer -1299/-1/CAT for human CD95 gene.
                                                                                                                                                                                                                                                        23-JUL-1998 (first entry)
                                                           (GENE-) GENESIS RES & DEV CORP LTD
                                                                               30-AUG-1996;
                                                                                                                                                             Homo sapiens
                                       Watson JD;
                                                                              96US-0713557.
                                                                                                   97WO-NZ00107
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RESULT 2
AAX84455/c
ID AAX844
XX AAX844
XX AAX844
XX BCNG;
KW BCNG;
KW Alzhei
KW Sick s
KW OJ-JUI
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Best Local :
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                    This sequence is a PCR primer for DNA encoding the brain cyclic nucleotide-gated ion channel (BCNG) of the invention. BCNG and BCNG-related proteins are useful in screening for compounds that modulate, interact or affect expression. Compounds, e.g. antagonists
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BCNG; brain cyclic nucleotide gated ion channel; epilepsy; hyperalgesia; Alzheimer's Disease; Parkinson's Disease; long QT syndrome; dyslexia; sick sinus syndrome; age-related memory loss; cystic fibrosis; sudden death syndrome; pacemaker rhythm dysfunction; sensory disorder; auditory disorder; respiratory disorder; attention deficit disorder; learning disability; drug addiction; therapy; PCR primer; ss.
                                                                                                                                                                                 Claim 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   autoimmune disease, e.g. by gene therapy for expressing transcription factors or expression of antisense sequences to inhibit transcription factor production. The regulatory nucleic acids and transcription factors are also useful for studying regulation of CD95 in vitro or in vivo, to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This sequence is a primer for the CD95 gene, and is used to isolate the regulatory nucleic acids of the invention. The regulatory regions (silencers or enhancers) are involved in apoptosis, e.g. inhibition of CD95 expression will inhibit apoptosis. Regulation of apoptosis is useful in treatment of cancer, (retro)viral infection, neurodegeneration and autofurnment discovers.
     agonists,
                                                                                                                                                                                                                                                                                                                          WPI; 1999-418922/35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-MAY-1998;
23-DEC-1997;
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treatment of cancer, vira
                                                                                                                                                                                                                                    nucleotide-gated
                                                                                                                                                                                                                                                              An isolated nucleic acid encoding a brain
                                                                                                                                                                                                                                                                                                                                                                                                             Bartsch D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (UYCO ) UNIV COLUMBIA NEW YORK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23-DEC-1998;
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                                                                                                                                                                              Page 205;
     identified
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BCNG
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97US-0997685
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                                                                                                                                                                                                                                       ion channel
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                                                                                                                                                                        213pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      coding sequence
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                                                                                                                                                                                                                                                                                                                                                                                                             Kandel ER,
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Pred. No. 3.6e+02;
D; Mismatches 1
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                                                                                                                                                                                                                                                              heart cyclic
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for modulating
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RESULT 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           neurological, renal, pulmonary, hepatic or cardiovascular condition. Such conditions include epilepsy, Alzheimer's Disease, Parkinson's Disease, long QT syndrome, sick sinus syndrome, age-related memory loss, cystic fibrosis, sudden death syndrome or pacemaker rhythm dysfunction. BCNG or BCNG-related protein can also be used to treat sensory disorders, e.g. blindness, loss of vision, loss of smell, numbness and lack of ability to taste. Also treatable are auditory disorders, respiratory disorders due to defects in central nervous system areas that control respiration or defects in the lungs, dyslexia, attention deficit disorder secretions. The proteins are useful targets for screening for drugs that are effective in the control of main and honoral controls.
WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                       HGK; NIK; Nck-interacting kinase; infection; inflammat
antisense gene therapy; antisense oligonucleotide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 27 BP; 6 A; 7 C; 9
                           Dean NM,
                                                    (ISIS-)
                                                                                 29-AUG-2000; 2000US-0651011
                                                                                                                                                                                                                                 modified_base
                                                                                                                                                                                                                                                                                                     modified_base
                                                                                                                                                                                                                                                                                                                                                       modified_base
                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human HPK/GCK-like kinase antisense oligonucleotide,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          05-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABK44429 standard;
                                                                                                           29-AUG-2000;
                                                                                                                                      12-FEB-2002
                                                                                                                                                               US6346416-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BCNG-related protein activity. Modulation is increased or decapermissivity or ion flow rate. Modulators of BCNG can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    effective in the control of pain and hyperalgesia
2002-237091/29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HPK/GCK-like kinase; antiinflammatory; cytostatic; antimicrobial;
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                                                    SISI
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                         Cowsert LM
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                                                                                                                                                                                        "Optionally 2'-methoxyethyl (2'MOE) nucleotides"
                                                                                                                                                                                                                                                                                                                 "Optionally
                                                                                                                                                                                                                                              "Phosphorothioate backbone; are 5-methylcytidines"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       tumour;
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New antisense compound, useful for preventing or delaying infection,

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RESULT 4
AAS03611
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               region of a nucleic acid molecule encoding HPK/GCK (undefined)-like kinase (HGK) (also known as NIK for NcK-interacting kinase), which specifically hybridises with and inhibits expression of HGK. (I) is useful for inhibiting the expression of HPK/GCK-like kinase in cells or tissues in vitro. (I) is useful prophylactically e.g. to prevent or delay infection, inflammation and tumour formation. (I) is also useful as a diagnostic and research reagent. (I) is also useful for distinguishing functions of various members of a biological pathway and in anticense agent thereasy make treat to the content of th
The sequence represents PCR primer rend9b1, used to detect RHD positive haplotypes in RHD negative individuals. The primer was used in DNA typing using PCR-sequence length polymorphism (SSP) of the Rhesus genes locus comprising the RHD, SMP1 and RHCE (all undefined) genes and/or the Rhesus box(es), preferably the hybrid Rhesus box, the upstream Rhesus box and/or the downstream Rhesus box. The RHD and RHCE genes are located at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      antisense gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Flegel WA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     02-NOV-1999;
31-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-OCT-2000; 2000WO-EP10745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200132702-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rhesus box; RHD positive; sequence length polymorphism; SSP; RHD; SMP1; RHCE; RHD negative; blood group typing; blood transfusion; antigen C; haemolytic disease of the newborn; chromosome 1 p34.1-p36; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAS03611 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 oligonucleotide targeted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 14; Column 43-44; 37pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                              New
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (DRKB-) DRK BLUTSPENDEDIENST BADEN WUERTTEMBERG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PCR primer rend9b1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAS03611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          inflammation or tumour formation, is targeted to nucleic acid molecule encoding HPK/GCK-like kinase (HGK) and hybridises and inhibits HGK
                                                                                                                                                                                                                                                                                     Example 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ength
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
                                                                                                                                                                                                                                                                                                                                                                                                 nucleic acid molecular structure, positive haplotypes in D-negative
                                                                                                                                                                                                                                                                                                                                                                        positive haplotypes RHCE genes -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2001-291052/30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  targeted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CACTGCACTTNCCA 14
                                                                                                                                                                                                                                                                                                                                                                    genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CACTGCATTTTCCA 14
                                                                                                                                                                                                                                                                                     Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Wagner FF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99EP-0121686
2000EP-0111696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    relates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  elates to an antisense compound (I) of 8-50 nucleobases in to a start codon region, coding region or 3'-untranslated
                                                                                                                                                                                                                                                                                     56;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        entry)
                                                                                                                                                                                                                                                                                 135pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81.4%;
85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present sequence represents an antisense d to human HPK/GCK-like kinase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ВP
                                                                                                                                                                                                                                                                                 English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         detect RHD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 11.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ping; blood transfusion; antigen C; chromosome 1 p34.1-p36; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                     useful for detection of common individuals, comprises RHD, SMP1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 positive haplotypes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
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Вþ Qy

 $\begin{array}{c} \texttt{CCCCCC} \\ \texttt{CCCCCC} \\ \texttt{CCCCCC} \\ \texttt{X} \\$ 

Query Match

81 .48;

Score 11.4;

BIG 9;

Length 27;

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RESULT 5
AAN81248
ID AAN8
    Дb
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                      No. repeat units: 1.

No. repeat units: 1.

Category of hybridisation to human DNA: 1.

Category of hybridisation to human DNA: 1.

The probe is complementary to one or two repeat units of VTNR loci.

The probe is used for genetic identification of a sample of human genomic DNA, eg for paternity testing, diagnosing cancer or genetic diseases, and studying post-bone marrow transplant chimerism. Under high criteria, it yields a locus-specific or mulit-loci, polymorphic hybridisation pattern, and is more specific for a single locus (or small no. of loci) than known probes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                chromosome 1 p34.1-p36. Rhesus box flanks the breakpoint region of the RHD deletion in the common RHD negative haplotypes. The primers of the invention are useful for: (1) the specific detection of the common RHD positive haplotypes in D-negative individuals: (2) blood group typing; (3) determining whether a patient can be transfused with RhD negative blood and whether blood is suitable for transfusion to patients who should not be exposed to antigen C: (4) assessing the risk of a RhD negative mother of conceiving or carrying an RhD positive feetus. Antiantibodies are useful for treating pregnant women who are Rhesus D negative, where the feetus is not homozygous for the RHD gene to treat
   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic probe; restriction fragment length polymorphism; paternity testing; ss.
                                                                                                                                                                                                                          Claim 7(e); Page 6;
                                                                                                                                                                                                                                                                                                   WPI; 1988-347751/49
                                                                                                                                                                                                                                                                                                                                Wallace
                                                                                                                                                                                                                                                                                                                                                                                           17-MAY-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                         26-MAY-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-DEC-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14-SEP-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAN81248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAN81248 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 22
                                See also
                                                                                                                                                                                              Total length: 27
                                                                                                                                                                                                                                                      with high specificity for single
                                                                                                                                                                                                                                                                    New oligonucleotide hybridisation probe
                                                                                                                                                                                                                                                                                                                                                            (CITY )
                                                                                                                                                                             Length repeat unit:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      prevent haemolytic disease of the newborn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0-YNH24 to identify intrinsic polymorphism of loci in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 CACTGCACTTNCCA 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CACTGCACTTGGCA 14
    27
                                  N981243-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP; 5 A; 7 C; 5
   BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                              OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                           88US-0194982
                                                                                                                                                                                                                                                                                                                                                                                                                         88EP-0304763
 7 A;
                                                                                                                                                                                                                                                                                                                                                              HOPE
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                                                                                                                                                                               31.
                                                                                                                                                                                                                        9pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81.4%;
85.7%;
 12 C;
                                                                                                                                                                                                                                                                                                                                                              MED CENTRE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27
   2 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ВÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         G; 5 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 11.4;
Pred. No. 3
6 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                      locus,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.1e+03;
2;
                                                                                                                                                                                                                                                   specific for repeat units useful e.g. in paternity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                      paternity testing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
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RESULT 6
  AAS04026
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                                                                                                                                                                            RESULT 7
                                                                                                                                                                                                                                                                    Ouery Match
Best Local S
Matches 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                             DNA, e.g. for paternity testing, diagnosing cancer or genetic diseases and studying bone marrow transplant chimerism. Under high criteria it yielded locus-specific or multi-loci, polymorphic hybridisation patter and is more specific for a single locus (or small number of loci) than
                         Human; probe; hypervariable number of tandem repeat; VN species identification; virus detection; minisatellite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New oligonucleotide hybridisation probe specific for repeat units with high specificity for single locus, useful e.g. in paternity
               Epstein-Barr virus;
                                                                 VNTR hybridisation
                                                                                             12-SEP-2001
                                                                                                                                                AAS04026 standard; DNA; 31
                                                                                                                                                                                                                                                                                                                         Sequence 27
                                                                                                                                                                                                                                                                                                                                                    known probes.
                                                                                                                                                                                                                                                                                                                                                                                                                    The probe is used for genetic identification of a sample of human
                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 7; page 6; 8pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1988-347751/49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29-MAY-1987;
17-MAY-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Probe 0-YNH24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAN82045 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wallace RB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (CITY ) CITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-MAY-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAN82045
                                                                                                                                                                                                                  14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14
                                                                                                                                                                                                                                                                      12;
                                                                                                                                                                                                                                1 CACTGCACTINCCA 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 CACTGCACTTNCCA 14
                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                  CACTGTACTTCCCA 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CACTGTACTTCCCA 27
                                                                                                                                                                                                                                                                                                                           BP; 7
                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                            (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         87US-0055224
88US-0194982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 88EP-0304763
                                                                                                                                                                                                                                                                                                                           Α,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         human genomic DNA.
                                                                 probe, minisatellite YNH24
                                                                                            entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       85.7%;
                                                                                                                                                                                                                                                                                    81
                                                                                                                                                                                                                                                                                                                         12 C;
                                                                                                                                                                                                                                                                                  5.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              probe 0-YNH24; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ВP
                                                                                                                                                                                                                                                                                                                           2
G;
                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. 3.1e+03;
                                                                                                                                                                                                                                                                                  Score 11.4;
Pred. No. 3
                                                                                                                                                                                                                                                                                                                         6 T; 0 other;
                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                 .1e+03;
                                                                                                                                                                                                                                                                                               DB
                                                                                                                                                                                                                                                                                               9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA;
                                                                                                                                                                                                                                                                                            Length 27;
                                                                                                                                                                                                                                                                                                                                                               hybridisation pattern, number of loci) than
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             human genomic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                      diseases,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                    Gaps :
                                                                                                                                                                                                                                                                    0;
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                                                                                                                                            RESULT 8
AAQ49016
ID AAQ4
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XX
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XX
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                                                                                                                                                                                                                                                                 Query Match
Best Local S
Matches 12
                                                                                                                                                                                                                                                                                                                  Sequence 31 BP;
                                                                                                                                                                                                                                                                                                                                                           The device is simple and reliable compared to those previously used in prior methods. The device is also readily applied outside of a laboratory environment, such as detection of pathogenic virus strains under
                                                                                                                                                                                                                                                                                                                                                                                                    characterising a nucleic acid analyte without requiring electrophoresis or the direct sequencing of analyte samples or analyte fragments. The device is particularly useful for individual and species identification
                                                                                                                                                                                                                                                                                                                                                                                                                                          hybridise to at least one allele of the nucleic acid analyte and comprises a fragment of an Epstein-Barr virus genome spanning from nucleotide 7421-8042. The device is useful for detecting or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The sequence represents the nucleotide sequence of variable number of tandem repeats (VMTR) hybridisation probe, minisatellite YNH24. The sequence was used as a probe to demonstrate the method of the invention, which is a device for detecting or characterising a nucleic acid analyte. The device comprises a panel of double stranded oligonucleotide probes immobilised on a solid support. Each probe has a first strand comprising a hypervariable number of tandem repeat sequences and a second
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New device with a panel of double stranded oligonucleotide probes immobblized on a solid support, useful for detecting or characterizing a nucleic acid analyte without requiring electrophoresis or the direct sequencing of analyte
           SBP; specific binding pair members; antibody; RGDP, replicable genetic display package; recombination; polymerase chain reaction; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16-APR-1996;
16-APR-1997;
                                                                Multimeric
                                                                                          22-APR-1994
                                                                                                                     AAQ49016;
                                                                                                                                              AAQ49016 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                  emergency
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                strand complementary to the first strand. The probe is selected to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Yeh HR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 1; Column 20; 24pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-366471/38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (USSA)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US6238866-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                               9
                                                                                                                                                                                                                                       1 CACTGCACTTNCCA 14
                                                                                                                                                                                                                                                                    Similarity
12; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                  conditions
                                                                                                                                                                                                                                                                    Conservative
                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96US-0015965
97US-0838157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99US-0246277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "Labelled with 4'~6-diamidino-2-phenylindole'
                                                              antibody chain primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /*tag=
                                                                                                                                                                                                                                                                                                                        Α;
                                                                                                                                                                                                                                                                               81.4%;
                                                                                                                                                                                                                                                                                                                        14 C;
                                                                                                                                                                                                                                                                                                                                                  in the
                                                                                                                                               36
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                                                                                                                                                                                                                                                                                                                        ω
                                                                                                                                              ВP
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                                                                                                                                                                                                                                                                                                                                                  field
                                                                                                                                                                                                                                                                                                                        G; 7 T; 0 other;
                                                                                                                                                                                                                                                                               Score 11.4; DB 22
Pred. No. 3.2e+03;
                                                                                                                                                                                                                                                                                            22;
                                                                                                                                                                                                                                                                    2
                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                               31;
                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                   Gaps
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QΥ
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                                                                                                                                                                                                                                                                                                                     AAH46243
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                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                The primers (AAQ48987-Q49045) are used in the amplification of Kappa and Lambda-chain genes of various antibodies. These genes are then recombined into the same replicon, resulting in very diverse librariof antibody chains, e.g. from unimmunised donors. It is also useful for chain shuffling, mutagenesis, humanising and CDR imprinting.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI;
  Human neuronal thread protein 17 and
                                                                                                                                                  WO200146237-A1
                                                                                                                                                                       Homo
                                                                                                                                                                                          cytostatic; anti-HIV; antiinflammatory;
                                                                                                                                                                                                                                              Human neuronal thread
                                                                                                                                                                                                                                                                                                             AAH46243 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 58; 81pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Prodn. of specific binding pair members, e.g. antibody chains by display on surface of replicable genetic display packages % \left( 1\right) =\left( 1\right) ^{2}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Winter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Griffiths AD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic
                                                                                     22-DEC-1999;
                                                                                                        18-DEC-2000;
                                                                                                                                                                                                               malignant
                                                                                                                                                                                                                                                                   25-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24-MAR-1992;
15-MAY-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-SEP-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                W09319172-A
                                           Mao Y,
                                                                                                                                                                                                                         Human neuronal thread protein 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (MEDI-) MEDICAL RES. COUNCIL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (CAMB-)
                                                                (BIOW-)
                                                                                                                                                                                                                                                                                                                                                                                                                   Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1993-320739/40
                       2001-441667/47.
                                                                                                                                                                     sapiens
                                                                                                                                                                                                    nant tumour; cancer; blood immunodeficiency virus; im
                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                   1 CACTGCACTINCCA
                                           Xie
                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAMBRIDGE ANTIBODY TECHNOLOGY
                                                                BIOWINDOW GENE DEV INC
                                                                                                                                                                                                                                                                                                                                                               CAGTGCACTTGCCA
                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                BP; 10
                                                                                                         2000WO-CN00585
                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Johnson KS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        92GB-0006318
92WO-GB00883
                                                                                     99CN-0125691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        93WO-GB00605
                                                                                                                                                                                                                                                                                                             DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                A; 13 C;
                                                                                                                                                                                                                                                                                                                                                                                                                 81.4%;
                                                                                                                                                                                                                                            protein 17 probe,
                                                                                                                                                                                                                                                                                                             41
                                                                                                                                                                                                                                                                                                                                                               22
                                                                                                                                                                                                                                                                                                             ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                7 G; 6 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                        0,:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Smith AJH,
                                                                                                                                                                                                                                                                                                                                                                                                                          Score 11.4;
                                                                                                                                                                                                    immune disorder;
                                                               SHANGHAI
                                                                                                                                                                                               disease; HIV infection;
mmune disorder; inflammatory condition;
                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                         recombinant production;
                                                                                                                                                                                                                                                                                                                                                                                                                   NO.
encoded polynucleotide, applicable
                                                                                                                                                                                                                                                                                                                                                                                                                  3.3e+03
                                                                                                                                                                                        immunomodulator; probe;
                                                                                                                                                                                                                                             SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Waterhouse
                                                                                                                                                                                                                                                                                                                                                                                                                            DB 14;
                                                                                                                                                                                                                                              NO:8
                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          libraries
                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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AAA66165
ID AAA6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S
Matches 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             production of the protein. The present invention additionally discloses an antagonist of neuronal thread protein 17 for therapeutic use, and an antagonist of neuronal thread protein 17. Neuronal thread protein 17. Neuronal thread protein 17. and nucleotides which encode it may be used for treating a variety of diseases, such as malignant tumours, blood diseases, HIV (human immunodeficiency virus) infection, immune disorders and inflammants.
                             (Canine familiaris) genome comprising the genome location of a marker selected from AAA66139 to AAA66942. The radiation hybrid map is useful
                                                                                                                  New radiation hybrid map of the dog, Canine familiaris, genome, useful for e.g. identifying genes implicated in phenotypic and behavioral traits or in genetic diseases and for studying dog pedigrees \,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          reactions or as a probe for hybridisation reactions, or in producing chips or microarrays. Sequences AAH46243-AAH46244 represent human neuronal thread protein 17 probes used in an exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       and inflammatory conditions. The protein may also be used to screen for modulators of its activity or for peptide fingerprinting identification. The polynucleotide can be used as a primer for nucleic acid amplification
                                                                                      Claim 1; Page 54; 87pp; English
                                                                                                                                                                                                           Galibert F,
                                                                                                                                                                                                                                                                                                                                                             WO200029615-A2
                                                                                                                                                                                                                                                                                                                                                                                          Canis
                                                                                                                                                                                                                                                                                                                                                                                                                                 Dog; genome; genomic marker; radiation hybrid chromosome location; gene marker; polymorphic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dog genomic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAA66165;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 41 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          nucleic acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 in diagnosis and treatment of cancer, immunological diseases and phlogosis
                                                          The present invention describes a radiation hybrid
                                                                                                                                                                                                                                                                      13-NOV-1998;
                                                                                                                                                                                                                                                                                                                               25-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                    phenotype;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAA66165 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention
                                                                                                                                                                                                                                         (CNRS ) CNRS
                                                                                                                                                                                                                                                                                                   15-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                          familiaris.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 CACTGCACTTNCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CACTGCAATTTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                       behaviour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               marker oligonucleotide sequence SEQ ID NO:27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                           Andre C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                         CENT NAT RECH SCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       relates to human neuronal thread protein 17 (AAB98894), encoding it (AAH46238), and a method for the recombinant
                                                                                                                                                                                                                                                                      98US-0108193
                                                                                                                                                                                                                                                                                                   99WO-IB01907
and localising dog genes, since genome and provides a dense map
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17; 40pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Α,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     81.4%;
85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12 C;
                                                                                                                                                                                                                                                                                                                                                                                                                       pedigree; ss
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chinese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
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Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  <u>ი</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11.4;
No. 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Τ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hemopathy, HIV infection,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DΒ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22;
                                                                                                                                                                                                                                                                                                                                                                                                                                    map; identification;
microsatellite marke
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                įt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                          map
 covers approximately 
regrating different
                                                          of the dog
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                     marker;
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e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoformans, Candida albicans and Aspergillus fumigatutus, viruses e.g. T-cell lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus medinesis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects. Detecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; K-ras; PCR primer; probe; capture probe; mutation detection; ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious diseas infection; 21 hydroxylase deficiency; Turner Syndrome; obbesity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                types (i.e. Type I and Type II) of markers. The map and the do markers (or complementary sequences) are especially useful to genes responsible for phenotypic and behavioural traits in dog identify morbid genes, to analyse diseases and identify implic in such diseases and their alleles, and to study dog pedigrees may also be useful for isolating corresponding human gene seques.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   oligonucleotide probes (I) for use on a support to which complementary oligonucleotide probes (II) will hybridise with little mismatch, where
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Designing capture oligonucleotide probes for use on a support complementary oligonucleotides hybridize with little mismatch
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    have melting temperatures within a narrow range. The method is useful
for detecting infectious diseases caused by bacterial infectious agents

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  invention describes a method (M1) for designing capture
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91.7%;
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Pred. No.
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to identify
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Best Local S
Matches 11
cancer is p53 gene, method is
                                                           e.g. Salmoneila, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoformans, Candida albicans and Aspergillus fumigatutus, viruses e.g. T-cell lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus medinesis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects. Detecting cancer involving oncogenes, tumour suppressor genes, or genes
                                                                                                                                                                                                                                          oligonucleotide probes (I) for use on a support to which complementary oligonucleotide probes (II) will hybridise with little mismatch, where
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; K-ras; PCR primer; probe; capture probe; mutation detection; ligase detection reaction; LDR; p53; BRCAL; BRCA2; infectious disease infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic environmental monitoring; food industry; feed industry; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the particular sites and identifying if ligation of the oligonucleotide probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. ABI82074 to ABI97366 represent oligonucleotide sequences used in the exemplification
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    have melting temperatures within a narrow range. The method is useful
for detecting infectious diseases caused by bacterial infectious agents

                                                                                                                                                                                                                                                                                                                  Example
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                                                                                                                                                                                                                                                                              present invention describes a method (M1) for designing capture
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            in DNA amplification, replication, recombination or repair, the specifically associated with a gene selected from BRCA1 gene, human papillomavirus types 16 and 18 and liver cancers. The
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184974/c
                                                                                 for detecting infectious diseases caused by bacterial infectious agents e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungai infectious agents e.g. Cryptococcus neoformans, Candida ablicans and Aspergillus fumigautus, viruses e.g. T-cell lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus medinesis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       presence or absence of the target nucreural assumption and 197546 represent oligonucleotide sequences used in the exemplification of the present invention.
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                                                                                                                                                                                                                        oligonucleotide probes (I) for use on a support to which complementary oligonucleotide probes (II) will hybridise with little mismatch, where (I) have melting temperatures within a narrow range. The method is useful
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ligase detection reaction; LDR; pS; BRCAl; BRCA2; infection
infection; 21 hydroxylase deficiency; Turner Syndrome; obse-
cancer; oncogene; tumour suppressor; human papillomavirus;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (CORR ) CORNELL RES
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                                  is specifically associated with a gene selected from BRCAl
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                                                  g cancer involving oncogenes, tumour suppressor genes, or genes in DNA amplification, replication, recombination or repair, the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CACTGCACTTGC
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   human papillomavirus types 16 and 18 and liver cancers. also used for environmental monitoring, forensics and t
                                                                                                                                                                                                                                                                                                               Fig 25; 300pp; English
                                                                                                                                                                                                                                                                             invention describes a method (M1) for designing capture
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
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monitoring,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB
                                                                                                                                                                                                                                                                                                                                                 with little mismatch
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Kliman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mutation detection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 20
                                                                                                                                                                                                                                                                                                                                                                                                                                      ₽,
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gene,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                            e.g. Salmoneila, Listeria monocytogenes and Haemophilus influenza, funga infectious agents e.g. Cryptococcus neoformans, Candida albicans and Aspergillus fumigautus, viruses e.g. T-cell lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus medinesis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the particular sites and identifying if ligation of the oligonucleotide probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. ABI82074 to ABI97546 represent oligonucleotide sequences used in the exemplification
                                                                                                                                                                                                                   oligonucleotide probes (I) for use on a support to which complementary oligonucleotide probes (II) will hybridise with little mismatch, where (I) have melting temperatures within a narrow range. The method is useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; K-ras; PCR primer; probe; capture probe; mutation detect ligase detection reaction; LDR; p53; BRCA1; infectious d infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; oncogene; tumour suppressor; human papillomavirus; fore environmental monitoring; food industry; feed industry; ss.
              Detecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
                                                                                                                                                                                                                                                                                                                                         Designing capture oligonucleotide probes for use on a support complementary oligonucleotides hybridize with little mismatch
                                                                                                                                                                                                                                                                                                                                                                                              WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-APR-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                    for detecting infectious diseases caused by bacterial infectious agents
                                                                                                                                                                                                                                                                                                          Example
                                                                                                                                                                                                                                                                                                                                                                                                                                Barany F,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (CORR )
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                                                                                                                                                                                                                                                                        present invention describes a method (M1) for designing capture
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORNELL RES FOUND INC
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                                                                                                                                                                                                                                                                                                                                                                                                                               Zirvi M,
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91.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                Kliman
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                                               (1) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoformans, Candida albicans and Aspergillus fumigautus, viruses e.g. T-cell lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus medinesis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects. Detecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCAl gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention describes a method (M1) for designing capture oligonuclectide probes (I) for use on a support to which complementary oligonuclectide probes (II) will hybridise with little mismatch, where
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the particular sites and identifying if ligation of the oligonuclectide probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. ABI82074 to ABI97546 represent oligonucleotide sequences used in the exemplification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ligase detection reaction; LDR; p53; BRCAl; BRCA2; infectious d infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; oncogene; tumour suppressor; human papillomavirus; fore environmental monitoring; food industry; feed industry; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Barany F, Zirvi M,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Capture oligonucleotide Zip ID#3885 oligo #1.
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91.7%;
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Pred. No.
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                                                                                                                                     Sequence
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| Query Match<br>Best Local<br>Matches | ATTORNEY AGENT NAME: Speck REGISTRATION REFERENCE/DO RELECOMMUNICAT TELEPHONE: TELEFAX: 20 TELEFAX: 20 INFORMATION FOR SEQUENCE CHARA LENGTH: 25 TYPE: nucle STRANDEDNESS TOPOLOGY: 1 08-713-557B-23  | CORRESPON ADDRESS STREET: CITY: CITY: STATE: STATE: COUNTRY ZIP: PCOMPUTE: COMPUTE:  | SSULT 1 5-08-713-557B-2 Sequence 23,  Sequence 23,  Patent NO. 593 GENERAL INFOI APPLICANT: APPLICANT: TITLE OF IT TITLE OF IT NUMBER OF 1 | 22<br>22<br>22<br>23<br>23<br>23<br>23<br>23<br>23<br>23<br>24<br>24<br>24<br>24<br>24<br>24<br>24<br>24<br>24<br>24<br>24<br>24<br>24   |
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| Simi<br>Simi                         | NORNEY/AGENT INFO<br>AAME: Speckman,<br>AEGISTRATION UUM<br>REFERENCE/DOCKET<br>LECOMMUNICATION:<br>PELEPHONE: 206-26:<br>PELEFAX: 206-26:<br>PELEX: 206-26:<br>PELEX: 25 base<br>PELEX: 25 base<br>POPOLOGY: linear  | ADDRESSEE: LAW ADDRESSEE: LAW STREET: 2601 E. CITY: Seattle STATE: WA ZIP: 98121 MPUTER READABLE MEDIUM TYPE: D: COMPUTER: IBM ( OPERATING SYSTE) SOFTWARE: Fast; SOFTWARE: Fast; SOFTMARE: 18 RRENT APPLICATION NUMI APPLICATION N | 578-23/c 23, Applica 23, Applica 1.5912168 INFORMATION ANT: Watso ANT: Ruder OF INVENTIO OF INVENTIO                                       | 100  |
| Cor                                  | ENT<br>FOR POOR STANDOR S | USA<br>USA<br>USA<br>USA<br>USA<br>USA<br>USA<br>USA   | 3/c<br>opli<br>opli<br>2168<br>2168<br>2168<br>2168<br>2168<br>Watt<br>Watt<br>Rudd<br>Rudd<br>PRUT/ENT                                    | 77777777777777777777777777777777777777   |
| llarity<br>Conserva                  | VITORNEY/AGENT INFORMATI NAME: Speckman, Ann REGISTRATION UNMBER: ELECOMMUNICATION UNMBER: ELECOMMUNICATION UNMBER TELEPHONE: 206-269-0563 TELEFAX: 206-269 D563 TELEFX: TORMATION FOR SEQ ID NO: EQUIENCE CHARACTERISTICS LENGTH: 25 base pairs TYPE: nucleic acid STRANDEDNESS: single TOPOLOGY: linear   | ADDRESSEE: LAW OFFICE ADDRESS: LAW OFFICE STREET: 2601 Elliott CITY: Seattle STATE: WA COUNTRY: USA COUNTRY: USA COUNTRY: USA COUNTRY: B121 Diskette COMPUTER: IBM COMPATO OPERATING SYSTEM: DOS SOFTWARE: FASTSEQ foi URRENT APPLICATION NUMBER: 11LNG DATE: 30-AUG-CLASSIEICATION DATA: APPLICATION NUMBER: ETITING DATE: APPLICATION NUMBER: ETITING DATE: APPLICATION NUMBER:  | B-23/c , Application US/087 5912168 FORMATION: T: Watson, James D. T: Rudert, Fritz INVENTION: CD95 RE INVENTION: AND TRA F SEQUENCES: 38  | พัพพัพพันส์สัสส์สัสส์สัสส์สัส  |
| 92.9<br>92.9<br>tive                 |   | DRM: Post particular properties DOS DOS DOS DOS Por DATA: DATA: DATA: DATA: Post DATA: DATA: Post DATA: DATA: Post DATA: DATA: Post DATA: DA | n US,<br>James<br>Fritz<br>CD99<br>AND   | 344<br>344<br>344<br>344<br>344  |
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| ore 13;<br>ad. No.<br>Mismat         | 11000.1004  | ite<br>ite<br>571  | ALIGNME 08713557B D. REGULATORY G TRANSCRIPTION  | 3077<br>3050<br>3507<br>3507<br>3507<br>3507<br>3507<br>3507   |
|                                      | 4   | § 4185<br>§ 10n 2.0  | E N  | 00000000000000000000000000000000000000   |
| DB<br>48;<br>hes                     | •   | 85<br>   | ACT S  | 9-61<br>00A-1<br>00A-6<br>00A-6<br>00A-6<br>00A-6<br>00A-6<br>00A-6<br>00A-7<br>7-11<br>7-23<br>0A-3<br>0A-3   |
| 2;                                   |   | O  | S<br>E SEQUENCES   | 1107<br>12208<br>11<br>1583<br>170<br>31<br>177<br>77<br>177<br>77<br>177<br>77  |
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        : OTHER INFORMATION: Antisense Oligonucleotide US-09-651-011A-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-246-277A-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 7, Application Patent No. 6238866
. GENERAL INFORMATION: Yeh,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 49
SEQ ID NO 29
LENGTH: 20
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TITLE OF INVENTION: ANTISENSE MODULATION OF HPK/GCK-LIKE KINASE EXPRESSION
FILE REFERENCE: RTS-0168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/651,011A CURRENT FILING DATE: 2000-08-29
                                                                                                                                            TELEFAX: (410) 436-2534
INFORMATION FOR SEQ ID NO: 7:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
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nes 12; Conserv
                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 31 base pairs
                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: 436-96 TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                       CLASSIFICATION: <Unknown> ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC COMPOTENTING SYSTEM: PC-DOS/MS-DOS
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ADDRESSEE: Office of the Chief Counsel
STREET: U.S. Army SBCCOM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Yeh, Homer R., Wick, Charles H.
TITLE OF INVENTION: NOVEL DETECTOR FOR NUCLEIC ACID
TYPING AND METHODS OF USING THE SAME.
HYPOTHETICAL:
                       MOLECULE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES: 13
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                                                            TYPE: nucleic acid
STRANDEDNESS: not relevant
                                              TOPOLOGY: not
                                                                                                                                                                                    TELEPHONE: (410) 436-1158
                                                                                                                                                                                                                                             NAME: Biffoni, U. John REGISTRATION NUMBER: 39908
                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/09/246,277A FILING DATE: 08-Feb-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY: United States of America ZIP: 21010-5423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STATE: Maryland
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: APG(EA)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                       TYPE: DNA (genomic)
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85.7%;
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RESULT 4
US-08-307-619-37
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CHROMOSOME/SEGMENT: YNH24 Minisatellite
SEQUENCE DESCRIPTION: SEQ ID NO: 7:
US-09-246-277A-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent No. 5733743
GENERAL INFORMATION:
Query Match
Best Local Similarity
Matches 12; Conserv
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Matches ]
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                                                                                                                                                          INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                APPLICATION NUMBER: GB 920
FILING DATE: 24 MAR-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/GE
FILING DATE: 15-MAY-1992
ATTORNEY/AGENT INFORMATION:
NAME: DAVID WITHERED: 26 10
                                                                                                                                                                                     REGISTRATION NUMBER: 36,107
REFERENCE/DOCKET NUMBER: 28
TELECOMMUNICATION INFORMATION:
                                                                                                                                         SEQUENCE CHARACTERISTICS:
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                                                                                          STRANDEDNESS:
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CLASSIFICATION: G011
                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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12; Conservative
                                                                                                          nucleic acid
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 Conservative
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Smith, Andrew JH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Winter,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PatentIn Release #1.0, Version #1.25 (EPO)
                                                                              linear
                                                                                                                                                                        312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Floppy disk
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                                                                                           single
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85.7%;
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85.7%;
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              Score 11.4; DB 1; Pred. No. 4.3e+02;
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Pred. No. 4.2e+02;
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                             DB 1;
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Pred. No. 4.3e+02; 0; Mismatches 2;

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RESULT 5
US-08-350-260A-83
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                                   US-08-350-260A-83
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Query Match
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                                                                                                                                  NFORMATION FOR SEQ ID NO:
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                                                                                                                                                                                                                                                                                                                              FILING DATE: 24-MAR-1993 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: GB 9
FILING DATE: 24-MAR-1992
PRIOR APPLICATION DATA:
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APPLICATION NUMBER: GB 9
FILING DATE: 15-MAY-1991
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STREET:
CITY: Cl
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OPERATING SYSTEM:
                                                                                                                                                                                               NAME: Clough, David W
REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: PCT/
FILING DATE: 10-JUL-1991
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ZIP: 60606-6402
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                                                               STRANDEDNESS:
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                                                                                               LENGTH:
                                                                                                                                               ELEPHONE:
                                                          H: 36 base pairs nucleic acid NDEDNESS: single
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Marshall, O'Toole, Gerstein, Murray & Borun
6300 Sears Tower, 233 South Wacker Drive
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VENTION: Methods for producing members of specific
VENTION: binding pairs
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IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                                 linear
                                                                                                                                              312-474-6300
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 81.4%;
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 Score 11.4;
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                                                         INFORMATION FOR SEQ ID NO:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compati
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APPLICATION NUMBER:
FILING DATE: 24-MAR-
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APPLICATION NUMBER: GB 9110549.4
FILING DATE: 15-MAY-1991
PRIOR APPLICATION DATA:
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                                     SEQUENCE CHARACTERISTICS:
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CLASSIFICATION:
                                                                                                        NAME: Clough, David W
REGISTRATION NUMBER: 36.
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                               FILING DATE:
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STREET: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
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5962255
nucleic acid
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VENTION: Methods for producing members of specific
VENTION: binding pairs
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24-MAR-1993
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                                                           Matches
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Best Local Similarity
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NFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: 28
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                 FILING DATE: 24-MAR-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/
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FILING DATE: 24-MAR-
PRIOR APPLICATION DATA:
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APPLICATION NUMBER: US/09/050,783
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MEDIUM TYPE: Floppy disk
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CORRESPONDENCE ADDRESS:
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APPLICATION NUMBER: US 0
FILING DATE: 16-SEP-1994
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                                                                                                                                                                  TYPE:
                                                                                                                                  STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                                                                                      NAME: David W. Clough REGISTRATION NUMBER:
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OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                        Local Similarity
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CAGTGCACTTGCCA 22
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Griffiths,
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85.7%;
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                                                                      Score 11.4; DB 3;
Pred. No. 4.3e+02;
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Pred. No. 4.
                                                          Mismatches
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US-08-362-706A-2
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Best Local Similarity
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INFORMATION FOR SEQ ID NO
         COMPUTER RÉADABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compati
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FILING DATE: 23-DEC-1994
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Schmonsees, William
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compati
                                                                                                                                                       CORRESPONDENCE ADDRESS
                                                                                                                                                                                      TITLE OF INVENTION:
                                                                                                                                                                                                      APPLICANT: Borden, APPLICANT: Heller,
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LENGTH: 18 base pairs
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APPLICANT:
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                                                                                                                                                                      NUMBER OF SEQUENCES:
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                                                           COUNTRY: USA
ZIP: 94301-1900
                                                                                             STATE:
                                                                                                          ADDRESSEE: Heller commence STREET: 525 University Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REGISTRATION NUMBER: 31796
REFERENCE/DOCKET NUMBER: 13265-1233
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ZIP: 94301-1900
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 OPERATING SYSTEM:
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(650)324-0638
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PC-DOS/MS-DOS
                                                                                                                                                                                                                   Paula A.
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84.68;
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                                                                                                                                                                                      Human Stromelysin-1 Promoter
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                NFORMATION FOR SEQ ID NO:
                                                                                                                                                                  SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/09/021,701
                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                          TELECOMMUNICATION INFORMATION: TELEPHONE: 650-236-2386
                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Kincaid, TITLE OF INVENTION: TITLE OF INVENTION:
                                                                                                                       ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
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SEQUENCE CHARACTERISTICS:
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                                                                         NAME: Choi, Wendy A. REGISTRATION NUMBER: 36 REFERENCE/DOCKET NUMBER:
                                                                                                                                      APPLICATION NUMBER: FILING DATE: 10-FEI CLASSIFICATION:
                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                              STREET: 3000 Har
CITY: Palo Alto
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nes 11; Conserv
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                             650-852-8063
                                                                                                                                                                                                                                                                                                  USA
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Wolber, Paul K.
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Webb, Peter G.
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Pred. No. 1.
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MOLECULE TYPE: C
HYPOTHETICAL: NC
ANTI-SENSE: NO
US-09-021-701-469
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                            Best Local
Matches
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Best Local
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                                                                                                                                                                                           TELEFAX: 650-852-8063
INFORMATION FOR SEQ ID NO:
                                                                                        MOLECULE TYPE:
HYPOTHETICAL:
ANTI-SENSE: NO
                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: Choi, Wendy A.
REGISTRATION NUMBER: 36,697
                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION TELEPHONE: 650-236-2386
                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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                          Conservative
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SYSTEM: PC-DOS/MS-DOS
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                                      74.3%;
84.6%;
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1165
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                                      Score 10.4; DB 4; Pred. No. 1.5e+03;
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Pred. No. 1
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                          Mismatches
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                                                  DB 4;
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Best Local Similarity
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GENERAL INFORMATION:
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HYPOTHETICAL: N
ANTI-SENSE: NO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILLING CATION:
CLASTICATION:
ATTORNBY/AGENT INFORMATION:
NAME: Choi, Wendy A.
NAME: Choi, Wendy A.
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REFERENCE/DOCKET NUMBER: 10
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-236-2386
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APPLICATION NUMBER: US,
FILING DATE: 10-FEB-19
                                                                 APPLICANT: Wabb, Peter G.
APPLICANT: Kinoaid, Robert H.
TITLE OF INVENTION: methods for evaluating oligonucleotide
TITLE OF INVENTION: probe sequences
                                  CORRESPONDENCE ADDRESS:
                                                                                                                                 APPLICANT:
                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
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                                                                                                                                                  APPLICANT:
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
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                                                                                                                                                                                                                   Application US/09021701
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Kincaid,
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Wolber, Paul K.
                                                                                                                               Delenstarr, Glenda C
                                                                                                                                                Wolber, Paul
                                                                                                                                                                Shannon, Karen W.
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Records Manager, Legal Department, Hewlett-Packard Company M/S 20
10 Hanover Street
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                                                probe sequences
1165
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Pred. No. 1.
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US-09-021-701-473/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 473, Application US/09021701
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                                                                                                                                                                                                                      STREET: JULY
CITY: Palo Alto
STATE: CA
                                                                            CURRENT APPLICATION DATA:
APPLICATION NUMBER: US,
FILING DATE: 10-FEB-19
                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
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HYPOTHETICAL: I
ANTI-SENSE: NO
                              ATTORNEY/AGENT INFORMATION: NAME: Choi, Wendy A.
                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: TITLE OF INVENTION: NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
REFERENCE/DOCKET NUMBER:
              NAME: Choi, Wendy A. REGISTRATION NUMBER:
                                                            CLASSIFICATION:
                                                                                                                         SOFTWARE:
                                                                                                                                      COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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3000 Hanover Street
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                                                                                                                         PatentIn Release #1.0, Version #1.30
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                                                                                           US/09/021,701
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; MOLECULE TYPE: I
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
US-09-021-701-474
Query Match
Best Local Similarity
Fatches 11; Conserve
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US-09-021-701-474/c
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Best Local Similarity
Matches 11; Conserv
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GENERAL INFORMATION:
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                                                                                                                                                                                                                                CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/021
FILING DATE: 10 - FEB-1998
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Choi, Wendy A.
REGISTRATION NUMBER: 36,697
REGISTRATION INFORMATION:
TELEPHONE: 650-236-2386
TELEPHONE: 650-852-8063
                                                                                                                                                                                               TELEFAX: 650-852-8063
[NFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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HYPOTHETICAL: NO
ANTI-SENSE: NO
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MEDIUM TYPE: Floppy disk
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TITLE OF INVENTION: Methods for evaluating oligonucleotide
TITLE OF INVENTION: probe sequences
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CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
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                                                                                                                                             TOPOLOGY: linear
                                                                                                                                                        TYPE: nucleic acid
STRANDEDNESS: sing
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: Palo Alto
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                74.3%; ilarity 84.6%; Conservative
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1165
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                Score 10.4; DB 4;
Pred. No. 1.5e+03;
0; Mismatches 2;
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Search completed: June 22, 2003, 00:01:34 Job time: 18.625 secs

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Result
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Maximum DB seq
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Maximum Match
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Perfect score:
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    nucleic search, using sw model

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1: /cgn2_6/ptodata/2/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/2/pubpna/PCT_NEW_PUB.seq:*
3: /cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*
4: /cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*
5: /cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
6: /cgn2_6/ptodata/2/pubpna/PCTUS_PUBCOMB.seq:*
7: /cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*
8: /cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*
9: /cgn2_6/ptodata/2/pubpna/US09_NEW_PUB.seq:*
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   Listing first 45 summaries
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: /cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*
: /cgn2_6/ptodata/2/pubpna/US06_PUBCOMB.seq:*
: /cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
: /cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*
: /cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*
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: /cgn2_6/ptodata/2/pubpna/US09_NEW_PUB.seq:*
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: /cgn2_6/ptodata/2/pubpna/US10_NEW_PUB.seq:*
: /cgn2_6/ptodata/2/pubpna/US10_NEW_PUB.seq:*
: /cgn2_6/ptodata/2/pubpna/US10_NEW_PUB.seq:*
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   GenCore version
(c) 1993 - 2003
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US-10-105-004-97
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US-09-784-674-473
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US-09-964-412-12
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496.907 Million cell updates/sec
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Compugen Ltd
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                                           Sequence 12, Appl
Sequence 12, Appl
Sequence 12, Appl
Sequence 203, Appl
Sequence 203, Appl
Sequence 45254, A
Sequence 479, Appl
Sequence 471, Appl
Sequence 472, Appl
Sequence 473, Appl
Sequence 475, Appl
Sequence 475, Appl
Sequence 475, Appl
Sequence 476, Appl
Sequence 477, Appl
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 Sequence
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    30929,
                Appl
6, Ap
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0 US-09-988-899-65

US-09-905-291A-275

US-09-907-853-275

US-09-907-841-275

US-09-907-841-275

US-09-906-742-275

US-09-906-742-275

US-09-906-838-275

US-09-907-613-275

US-09-907-613-275

US-09-904-820-275

US-09-904-820-275

US-09-904-708-275

US-09-904-708-275

US-09-906-740-275

US-09-906-740-275

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US-10-098-263B-53671

US-10-098-263B-94806

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US-10-121-857-80

US-10-113-794A-3

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275, App 1 1 275, App 1 275, App 2 275, App 
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53671, A
94806, A
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ALIGNMENTS

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RESULT 1
US-09-964-667-12
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Publication No. US20030033621A1
GENERAL INFORMATION:
APPLICANT: de la Monte, Suzanne
                                                                                                                      TELEPHONE: 202-371-2600
TELEPAX: 202-371-2540
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn Release #1.0, Version CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/964,667
FILING DATE: 28-Sep-2001
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein
STREET: 1100 New York Ave., Suite 600
TOPOLOGY: linear MOLECULE TYPE: cDNA SEQUENCE DESCRIPTION: SEQ ID NO: 12:
                                                                                                                                                                                                NAME: Esmond, Robert W.
REGISTRATION NUMBER: 37.8
REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: Transgenic Animals and Cel
Screening Drugs Effective
of Alzheimer's Disease
                                                       LENGTH: 14 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wands,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Jack R.
                                                                                                                                                                                                                                            32,893
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Fox,
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RESULT 3
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US-09-964-666-12
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Best Local Similarity
Matches 14; Conserv
                                                                                   Sequence 12, Application US/09964412 Patent No. US20020129391A1 GENERAL INFORMATION:
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO: 12:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Esmond, Robert W.
REGISTRATION NUMBER: 32,893
REFERENCE/DOCKET NUMBER: 0609.4370000
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2640
TELEFAX: 202-371-2540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/964,666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
RESSIER, Goldstein & Fox, P.L.L.C.
ADDRESSEE: Sterne, Kessler, Goldstein & Fox, P.L.L.C.
STREET: 1100 New York Ave., Suite 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: Transgenic Animals and Cell Lines for
Screening Drugs Effective for the Treatment or Prevention
of Alzheimer's Disease
TITLE OF INVENTION: Transgenic Animals and Cell Lines for Screening Drugs Effective for the Treatment or Prevention
                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear MOLECULE TYPE: cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                              APPLICANT: de la Monte, Suzanne
Wands, Jack R.
                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE DESCRIPTION: SEQ ID NO: 12:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                        1 CACTGCACTTNCCA 14
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                                                                                                                                                                                                                                  CACTGCACTTNCCA 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 28-Sep-2001 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
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Pred. No. 3.3e+
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US-10-105-004-97/c
US-10-105-004-97/c
; Sequence 97, Application US/10105004
; Publication No. US20030105002A1
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TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                       COUNTRY: USA
ZIP: 02109-2170
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION NUMBER: US/10/105,004
FILING DATE: 22-Mar-2002
PRIOR APPLICATION UNMBER: US/08/754,477
FILING DATE: 22-NOV-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 20005-3934

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARAE: PATCHTIN Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler,
STREET: 1100 New York Ave.,
                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY, HOAG & ELIOT LLP
STREET: One Post Office Square
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: <Unknown> ATTORNEY/AGENT INFORMATION:
        ATTORNEY/AGENT INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: RIEG COMPOSITIONS AND THERAPEUTIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE DESCRIPTION: SEQ ID NO: 12:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear MOLECULE TYPE: cDNA
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                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Murray, Jeffrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14;
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TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                         STATE: MA
                                                                                                                                                                                                                                                                                                            CITY: Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Esmond, Robert W.
REGISTRATION NUMBER: 32,893
REFERENCE/DOCKET NUMBER: 0609.4370000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 28-Sep-2001
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100.0%;
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Pred. No. 3.3e+02;
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Length 14; Indels

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                                                                                                                                                                                                                                                                                         US-10-098-263B-65254
                                                                                                                                                                                                                                                                                                                                                                 日
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-215-112-2203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-215-112-2203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 14936
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 2203
LENGTH: 25
TYPE: DNA
                                                                                                                                                                                                                                   Sequence 65254, Application US/10098263B Publication No. US20030104410A1 GENERAL INFORMATION:
                                   SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1 SEQ ID NO 65254 LENGTH: 25'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                          APPLICANT: Mittman, Michael
TITLE OF INVENTION: Human Microarray
FILE REFERENCE; 3118.1
CURRENT APPLICATION NUMBER: US/10/098,263B
CURRENT FILING DATE: 2003-01-08
                                                                                    PRIOR APPLICATION NUMBER: 60/276,759
PRIOR FILING DATE: 2001-03-16
NUMBER OF SEQ ID NOS: 131066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Michael Mittmann
TITLE OF INVENTION: Method of Genetic Analysis of Probes:
TITLE OF INVENTION: Test3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/10/215,112 CURRENT FILING DATE: 2002-08-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILE REFERENCE: 3119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: Synthetic Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: 97: SEQUENCE CHARACTERISTICS:
                      TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION: TELEPHONE: 617-832-1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20 CACTGCACGTCCCA 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: 617-832-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Arnold, Beth E. REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                     81.4%;
85.7%;
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85.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 11.4;
Pred. No. 2
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RESULT 8

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RESULT 7
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                                                                                                                                 US-09-784-674-469
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                                                               Matches
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Best Local
                                                                               Query Match
Best Local :
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SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-236-2386
TELEFAX: 650-852-8063
                                                                                                                                              ANTI-SENSE: NO
SEQUENCE DESCRIPTION: SEQ ID
                                                                                                                                                                                             TOPOLOGY: linear MOLECULE TYPE: cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                               HYPOTHETICAL: NO
20 ACTGCATTTACCA 8
                                                               11;
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                              2 ACTGCACTTNCCA 14
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                                                                               Similarity
                                                                                                                                                                                                                              TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                          NAME: Choi, Wendy A.
REGISTRATION NUMBER: 36,697
REFERENCE/DOCKET NUMBER: 10
                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 09/021,701 FILING DATE: 10-FEB-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/09/784,674
FILING DATE: 15-Feb-2001
CLASSIFICATION: NO. US20030054346A1 available
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ZIP: 94304
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: 3000 Hanover Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kincaid, Robert H. OF INVENTION: Methods for evaluating oligonucleotide {\sf OF}
                                                                                                                                                                                                                                                              LENGTH: 20 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Application US/09784674 o. US20030054346A1
                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
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Delenstarr, Glenda C
Webb, Peter G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Records Manager,
Company M/S 20BO
                                                                               74.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0,
                                                             Score 10.4; DB Pred. No. 1e+04; 0; Mismatches
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Pred. No. 2.7e+03;
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                                                                                                                                                NO: 469:
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                                                                                            9;
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                                                                                            Length 20;
                                                               Indels
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US-09-784-674-470/c

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                                                                                                                                                                 Seguence 471, Application US/09784674 Publication No. US20030054346A1
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Best Local Similarity
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                                                                                                                                                  GENERAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION FOR SEQ ID NO: 470:
probe sequences NUMBER OF SEQUENCES: 1165
                                                                                APPLICANT: Shannon, Karen W.
Wolber, Paul K.
Wolberstarr, Glenda C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-236-2386
TELEFAX: 650-852-8063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 09/021,701
FILING DATE: 10-FEB-1998
ATTORNEY/AGENT INFORMATION:
NAME: Choi, Wendy A.
                                  Kincaid, TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear MOLECULE TYPE: cDNA
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                                                                                                                                                                                                                                                                               19 ACTGCATTTACCA 7
                                                                                                                                                  INFORMATION
                                                                                                                                                                                                                                                                                                   2 ACTGCACTTNCCA 14
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REGISTRATION NUMBER: 36,697
REFERENCE/DOCKET NUMBER: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/09/784,674 FILING DATE: 15-Feb-2001 CLASSIFICATION: No. US20030054346
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS: single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: Records Manager, Legal Department, Hewlett-Packard
Company M/S 20B0
                                                                                                                                                                                                                                                                                                                                                        Conservative
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                                                                         Webb, Peter G
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Webb, Peter G.
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                                                                                                                                                                                                                                                                                                                                                                        74.38;
                              Robert H. Methods for evaluating oligonucleotide
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                                                                                                                                                                                                                                                                                                                                                                        Score 10.4;
Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                         DB 9; Length 20;
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RESULT 10
US-09-784-674-472/c
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                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO: 471:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
COUNTRY: USA
ZIP: 94304
COMPUTER READABLE FORM:
COMPUTER: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HYPOTHETICAL: NO ANTI-SENSE: NO
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TELEPHONE: 650-236-2386
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSEE: Records Manager, Legal Department, Hewlett-Packard
Company M/S 20BO
                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: Methods for evaluating oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear MOLECULE TYPE: cDNA
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                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 1165
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18 ACTGCATTTACCA 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 ACTGCACTTNCCA 14
                                                                                                                        STATE: CA
                                                                                                                                               CITY: Palo Alto
                                                                                                                                                              ADDRESSEE: Records Manager, Legal Department, Hewlett-Packard
Company M/S 20BO
STREET: 3000 Hanover Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Choi, Wendy A. REGISTRATION NUMBER: 36,697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 09/021,701 FILING DATE: 10-FEB-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STATE: CA
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TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                       Delenstarr, Glenda C.
Webb, Peter G.
Kincaid, Robert H.
                                                                                                                                                                                                                                                                                                                                                                                         Shannon, Karen W.
                                                                                                                                                                                                                                                                                                                                                                      Wolber, Paul K.
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TELECOMMUNICATION INFORMATION:

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; SEQUENCE DESCRIPTION: SEQ ID NO: 472: US-09-784-674-472
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: nucleic acid
STRANDENNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA
HYPOTHETICAL: NO
                                                                                                                     CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/784,674
FILING DATE: 15-Feb-2001
CLASSIFICATION: NO. US20030054346A1 available
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-236-2386
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APPLICATION NUMBER: 09/021,701
FILING DATE: 10-FEB-1998
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                                                             APPLICATION NUMBER: 09/021,701 FILING DATE: 10-FEB-1998 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kincaid, Robert H.
TITLE OF INVENTION: Methods for evaluating oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
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Company M/S 20BO
STREET: 3000 Hanover Street
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/09/784,674
FILING DATE: 15-Feb-2001
CLASSIFICATION: No. US20030054346A1 available
                     NAME: Choi, Wendy A. REGISTRATION NUMBER:
                                                                                                                                                                                                                           SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                    COUNTRY: UZIP: 94304
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STATE: CA
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REFERENCE/DOCKET NUMBER: 10971464-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Shannon, Karen Wolber, Paul K.
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Webb, Peter G.
Kincaid, Robert H.
                                                                                                                                                                                                                                                                                                                                                       USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 10.4; DB 9; Length 20; Pred. No. 1e+04;
                       36,697
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US-09-784-674-474/c
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Best Local Similarity
Matches 11; Conser
                                                                                                                              TELEPHONE: 650-236-2386
TELEFAX: 650-852-8063
INFORMATION FOR SEQ ID NO: 474:
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                                                                                                                                                                                                                                            APPLICATION NUMBER: 09/021,701
FILING DATE: 10-FEB-1998
ATTORNEY/AGENT INFORMATION:
NAME: Choi, Wendy A.
                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION DATA: US/09/784,674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ANTI-SENSE: NO
TOPOLOGY: linear MOLECULE TYPE: cDNA HYPOTHETICAL: NO
                                                                                                                                                                                     TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kincaid, Robert H. TITLE OF INVENTION: Methods for evaluating oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE DESCRIPTION: SEQ ID NO: 473:
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                                                                                                               SEQUENCE CHARACTERISTICS
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                                                    TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                         REGISTRATION NUMBER: 36, REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                        FILING DATE: 15-Feb-2001 CLASSIFICATION: No. US20030054346A1 available
                                                                                                                                                                                                                                                                                                                                                                                                                OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
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TYPE: nucleic acid
STRANDEDNESS: single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 94304
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                                                                                         LENGTH: 20 base pairs
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Webb, Peter G.
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ANTI-SENSE: NO

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US-09-784-674-475/c
US-09-784-674-475/c
: Sequence 475, Application US/09784674
: Publication NO. US20030054346A1
: GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; SEQUENCE DESCRIPTION: SEQ ID NO: US-09-784-674-474
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Best Local S
Matches 11
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FILING DATE: 10-FEB-1998
ATTORNEY/AGENT INFORMATION:
NAME: Chol, Wendy A.
REGISTRATION NUMBER: 36,697
REFERENCE/DOCKET NUMBER: 1097146.
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-236-2386
TELEFAX: 650-82-8063.
INFORMATION FOR SEQ ID NO: 475:
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Best Local Similarity
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MEDIUM TYPE:.Floppy disk
                                                                                                                                                                                                                                                                       TOPOLOGY: linear MOLECULE TYPE: cDNA
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                                                                                     2 ACTGCACTTNCCA 14
                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                       LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/09/784,674 FILING DATE: 15-Feb-2001 CLASSIFICATION: NO. US20030054346
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Company M/S 20B0
STREET: 3000 Hanover Street
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Wolber, Paul
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Webb, Peter G.
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                                                                                                                                        74.3%;
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                                                                                                                                        Score 10.4;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US20030054346A1 available
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                                                                                                                         Mismatches
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le+04;
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; Sequence 27, Application US/09887145
; Publication US20030082139A1
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                                                                                                                                                                                                                                                                                                                                                                                                                  ; SEQUENCE DESCRIPTION: SEQ ID NO: 476: US-09-784-674-476
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US-09-784-674-476/c
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Best Local Similarity
Matches 11; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Choi, Wendy A.
REGISTRATION NUMBER: 36,697
REFERENCE/DOCKET NUMBER: 1097:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-236-2386
TELEPHONE: 650-852-8063
INFORMATION FOR SEQ ID NO: 476:
                                                                                                                                        GENERAL INFORMATION:
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         CORRESPONDENCE ADDRESS:
ADDRESSEE: David Prashker,
STREET: P.O. Box, 5387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/09/784,674
FILING DATE: 15-Feb-2001
CLASSIFICATION: No. US20030054346A1 available
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                  APPLICANT: Kim, Seur TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear MOLECULE TYPE: cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Methods for evaluating oligonucleotide
                                                                NUMBER OF SEQUENCES:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 09/021,701 FILING DATE: 10-FEB-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn.Release #1.0,
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STATE: CA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: Records Manager, Legal Department, Hewlett-Packard Company M/S 20BO .
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Webb, Peter G.
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9, 2

Length 20; Indels

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Gaps

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Version #1.30

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CITY: Magnolia
STRIE: Massachusetts
COUNTRY: USA
ZIP: 01930
ZIP: 0
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AZ663066 1M0542D06

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                        Result
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Maximum DB seq length: 50
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Sequence:
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                                                              Score
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AUTHORS
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ORGANISM
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MEDLINE
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostómi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 50)
1 (bases 1 to 50)
Suzuki, Y., Taira, H., Tsunoda, T., Mizushima-Sugano, J., Sese, J., Hai, H., Ota, T., Isogai, T., Tanaka, T., Morishita, S., Okubo, K., Sakaki, Y., Nakamura, Y., Suyama, A. and Sugano, S.

Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites
EMBO-Rep. 2 (5), 388-393 (2001)
                                                                                                                                                                                                                                                                                                                       Contact: Yutaka Suzuki
Department of Virology
Institute of Medical Science, University of Tokyo
1. Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Email: ysuzuki@ims.u-tokyo.ac.jp
Suzuki.y. Yoshitomo-Nakagawa.K., Maruyama,K., Suyama,A. and Sugano,S. Construction and characterization of a full length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).
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HRC09846, mRNA sequence.
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AZ779219
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AZ481615 1M0306A03
X85346 H. Sapiehs t
AA986325 uc79d12.x
AZ968733 2M024jP12
AZ79219 2M0015N18
AZ803519 2M0064A02
AQ025283 BF(3)3105
AZ484892 1M0311N07
AZ4848960 1M0306G11
AZ802603 2M0061L06
AA029741 ze95d04.r
AZ628318 1M0480082
AL765117 Arabidops
AZ474531 Arabidops
AZ474543 1M0080M23
AA001102 zh82e02.r
H45385 yn99c12.r1
AZ495722 1M0331E15
BH863663 SALK 0943
AZ758301 1M0550C18
AU102480 AU102480
AU102875 AU102875
AU103683 AU103683
AZ378215 1M0132E21
AZ2569584 1M0120C18
AZ2569584 1M0120C18
AZ2567576 1M0349H3
AZ369796 2M0198M21
AZ393956 ts08908.x
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AU105465 BJ066024 AZ936711 AV962509 AZ309394

BJ066024 BJ066024 AZ936711 2M0193103 AV962509 AV962509 AZ309394 1M0013P22 AZ801886 2M0060103

FEATURES

Location/Qualifiers

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African clawed frog.
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BJ066024.1 GI:17479075
                                                                                                                                                                                                                                                                                                                                                                                               Email: tshini@genes.nig.ac.jp
Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Center For Genetic Resource Information
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Contact: Tadasu
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Amphibia; Batrachia; Anura; Me
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /db_xref="taxon:9606"
/clone="HRC09846"
./clone="hBC09846"
./clone="b="Sugano Homo sapiens cDNA library"
./clone="pliferential display comparison of untreated note="pliferential display comparison of untreated dimethylfumarate treated U937 cells"
a 12 c 14 g 12 t
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/db_xref="taxon:8355"
/clone="XL084o15"
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Mesobatrachia; Pipoidea
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2.2e+04;
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; Pipidae;
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           26-APR-2001
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                                                                                                      2 ACTGCACTINCC 13
           AV962509
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Contact: Robert B.
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Tel: 801 585 5606
Fax: 801 585 7177
Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error: 0.
Plate: 0193 row: I column: 03
Seq primer: CACACAGGAAACAGCTATGACC
Class: plasmid ends
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    University of Utah Genome Center
University of Utah
Rm. 308, Biomedical Polymers Research
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               High quality sequence stop: 39
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Mammalla; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                    was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polymicaleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pMSM2 (gil4732114)gblAF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to
                                                                                                                                       adaptored vector DNA, and transformed into chemically-competent E. coli X:10-Gold (Stratagene) cells and selected for ampicillin resistance." 10\ c \ 8\ g \ 11\ t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note="Vector: PWD42nv; Purified genomic DNA from M. musculus C57BL/6J (female) was obtained from the Jackson Laboratory Mouse DNA Resource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /clone="UUGC2M0193I03"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /lab_host="E. coli strain XL10-Gold, T1-resistant,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /clone_lib="Mouse 10kb plasmid UUGC2M library"
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                                 78.6%;
91.7%;
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Pred. No.
core 11; DB 17; red. No. 7e+04; Mismatches 1
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EST 14-MAR-2002

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Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error: (
Plate: 0013 row: P column: 22
Seq primer: CACACAGGAAACAGCTATGACC
Class: plasmid ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unpublished (2000)
Contact: Nori Satch
Department of Zoology
                                                                                            Tel: 801 585 5606
Fax: 801 585 7177
                                                                                                                                                                                                                                                            Dunn, D., Aoyagi, A., Barber, M., Beacorn, T., Duval, B., Hamil, C., Islam, H., Longacre, S., Mahmoud, M., Meenen, E., Pedersen, T., Reilly, M., Rose, M., Rose, R., Stokes, R., Tingey, A., von Niederhausern, A. and Wright, D., Welss, R.

Mouse whole genome scaffolding with paired end reads from 10kb
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ciona intestinalis
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                                                                                                                                                                       University of Utah Genome Center University of Utah
                                                                                                                                                                                                             Contact: Robert B.
                                                                                                                                                                                                                               plasmid inserts
Unpublished (2000)
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AZ309394.1 GI:10350335
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clone UUGC1M0013P22 R, DNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Email: satoh@ascidian.zool.kyoto-u.ac.jp
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                                                                                                                                                      Biomedical
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/Clone_lib="Nori Satch unpublished cDNA library,
/clone_lib="Nori Satch unpublished cDNA library,
/tissue_type="whole animal"
/dev_stage="larva"
/note="Vector: pBluescript SK"
1 g 15 t
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/db_xref="taxon:7719"
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91.7%;
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Pred. No.
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olumn: 22
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Contact: Robert B. We
University of Utah Ge
University of Utah
Rm. 308, Biomedical I
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                   Tel: 801 585 5606
Fax: 801 585 7177
Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error: (
Plate: 0060 row: I column: 03
Seg primer: CACACAGGAAACAGCTATGACC
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Dunn,D., Aoyagi,A., Barber,M.,
Islam,H., Longacre,S., Mahmoud
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Location/Qualifiers
Class: plasmid ends
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptored DNA was purified and size-selected for a 9.5 to
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="UUGC1M0013P22"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (http://www.jax.org/resources/documents/dnares/). The DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /lab_host="E. Coli strain XL10-Gold, T1-resistant, F-";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /sex="Male"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GI:12954209
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84.6%;
                                                                                                                                                                                                                               Genome
                                                                                                                                                                                                                                                       Weiss
                                                                                                                                                                                                                                                                                                                     scaffolding with paired end reads from 10kb
                                                                                                                                                                                Polymers Research
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Pred. No. 1.3e+05;
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                                                                  Std Error: 0.00
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                                                                                                                                                                                                                               Center
                                                                                                                                                                                                                                                                                                                                                                                                               Beacorn, T., Duval, B., Hamil, C.,
                                                                                                                                                                             Bldg.,
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ORGANISM
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VERSION
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Best Local :
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                                                                  Fax:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mus musculus Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Eukaryota; Metazoa; Chordata; Sciurognathi; Muridae; Murinae; Mus Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus 1 (bases 1 to 41)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 CACTGCACTTNCC 13
   Class: plasmid ends
                                  Seq primer: CACACAGGAAACAGCTATGACC
                                                                                                                                                                                                                                                                                 University of Utah Genome Center University of Utah
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AZ663066 41 bp DNA linea: 1M0542D06R Mouse 10kb plasmid UUGCIM library Mus clone UUGCIM0542D06 R, DNA sequence.
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                                                                                                                                                                                                                                                             Rm.
                                                                                                                                                                                                                                                                                                                                                Contact: Robert B.
                                                                                                                                                                                                                                                                                                                                                                             Unpublished (2000)
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AZ663066.1 GI:11800212
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                                                                                                                                                                                                                                                    Biomedical
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/clone="UUGC2M0060I03"
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/note="Vector: PWD42nv; Purified genomic DNA from M.
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84.6%;
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/organism="Homo sapiens"
/db_xref="taxon:9606"
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29 CACGGCACTTTCC 41
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Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites
EMBO.Rep. 2 (5), 388-393 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 CACTGCACTTNCC 13
                                                                                                                                                                          Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 (bases 1 to 50)
Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J.,
H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okub
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AU102646 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone CAS05488, mRNA sequence.
                                                        ,S. Construction and characterization of a full length-enriched a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).
                                                                                                                    Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A.
                                                                                                                                                                                                                                                                        Contact: Yutaka Suzuki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Location/Qualifiers
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                                                                                                                                                 ysuzuki@ims.u-tokyo.ac.jp
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1. .50
                         Location/Qualifiers
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/strain="C57BL/6J"
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/note="Vector: PWD42nv; Purified genomic DNA from M.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contract: Robert B. Weiss
University of Utah Genome Center
University of Utah
Rm. 308, Biomedical Polymers Research Bldg.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tel: 801 585 5606
Fax: 801 585 7177
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34 bp DNA linear GSS 04-OCT-200
1M0285F10F Mouse 10kb plasmid UUGC1M library Mus musculus genomic
clone UUGC1M0285F10 F, DNA sequence.
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Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Seq primer: CGTTGTAAAACGACGGCCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Email:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unpublished (2000)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ddunn@genetics.utah.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          USA
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/clone_llb="Sugano Homo sapiens cDNA library"
/note="Differential display comparison of untreated
/note="Differential display comparison of untreated
dimethylfumarate treated U937 cells"
a 16 g 8 t
                adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pwD42 (gl14732114|gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated
                                                                                                                   was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The
                                                                                                                                                                                                                                                            /note="Vector: PWD42nv; Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson
                                                                                                                                                                                                                                                                                                                                                                                   /organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
                                                                                                                                                                                                                      (http://www.jax.org/resources/documents/dnares/). The DNA
                                                                                                                                                                                                                                               Laboratory Mouse DNA Resource
                                                                                                                                                                                                                                                                                                    /lab_host="E. Coli strain XL10-Gold, T1-resistant, F-"
                                                                                                                                                                                                                                                                                                                               /sex="Male"
                                                                                                                                                                                                                                                                                                                                              /clone_lib="Mouse 10kb plasmid UUGC1M library"
                                                                                                                                                                                                                                                                                                                                                                 /clone="UUGC1M0285F10"
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13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A pipeline for automated high-throughput generation of FSTs (flanking sequence tags) from Arabidopsis thaliana T-DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                 availability can be found at: http://www.mpiz-koeln.mpg.de/GABI-Kat/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          and Weisshaar, B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Strizhov, N., Li, Y., Rosso, M., Viehoever, P., Dekker, K., Saedler, H
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                                                                                                             /Clone_lib="Arabidopsis thaliana T-DNA insertion lines"
/note="PCR was performed on DNA from Arabidopsis thaliana
plants (T1) which were transformed with the T-DNA from
vector pAC161. The lines contain one or more T-DNA
insertions. The DNA fragment(s) resulting from the PCR
were directly sequenced to determine the genomic sequence
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                           removed"
                                                processed
                                                                                                                                                                                                                                                                        /clone="GK-186B11-014622"
                                                                                                                                                                                                                                                                                                 /db_xref="taxon:3702"
                                                                                                                                                                                                                                                                                                                        /strain="Columbia
                                                                                                                                                                                                                                                                                                                                          /organism="Arabidopsis thaliana"
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                                                                  he insertion. Sequences displaying significant to the A. thalaina nuclear genome sequence were
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rosso, M.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sequence GK-186B11-014622,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 34;
                                                  derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     core
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (Stratagene) cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     eudicots;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GSS 19-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tracheophyta;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
```

71.48;

Score 10;

DΒ 17;

Length 46;

Indels

0;

Gaps

0

Pipoidea;

Pipidae;

Euteleostomi;

Shin-i, T. and Kohara

linear

ear EST h library

Xenopus

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BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 11
AZ462142/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COCUS
Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity Matches 10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1M0269K14F Mouse 10kb plasmid UUGCIM
clone UUGCIM0269K14 F, DNA sequence.
AZ462142
AZ462142.1 GI:10620267
GSS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Robert B. Weiss
University of Utah Genome Center
University of Utah
Rm. 308, Biomedical Polymers Res.
84112, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              High quality sequence stop: 47.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error:
Plate: 0269 row: K column: 14
Seg primer: CGTTGTAAAACGACGGCCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tel: 801 585 5606
Fax: 801 585 7177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unpublished (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         plasmid inserts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mouse whole genome scaffolding with paired end
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C., Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von Niederhausern,A. and Wright,D.,Weiss,R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mus musculus
Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AZ462142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         house mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   lass: plasmid ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGCACTTACCA 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (bases 1 to 47)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGCACTTNCCA 14
                                                                  12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                  Ω
                                                                                                                             10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWD42 (gil4732114|gblAF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Biomedical Polymers Research Bldg.,
                                                            adaptored vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

1 c 25 g 9 t
                                                                                                                                                                                                                                           (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptored DNA was purified and size-selected for a 9.5 to
                                                                                                                                                                                                                                                                                                                                                                                                /note="Vector: PWD42nv; Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jack
                                                                                                                                                                                                                                                                                                                                                                              Laboratory Mouse DNA Resource
                                                                                                                                                                                                                                                                                                                                                                                                                                                       /sex="Male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /clone_lib="Mouse 10kb plasmid UUGC1M library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /clone="UUGC1M0269K14"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /strain="C57BL/6J"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ∕organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                'lab_host="E. Coli strain XL10-Gold, T1-resistant, F-"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   90.9%;
             71.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chordata;
Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No. 2.4e+05;
             Score
             10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 UUGC1M
           DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.00
         17;
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         Length 47;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20 S. 2030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          reads from 10kb
                                                                                                                                                                                                                                                                                                                                                                                                from the Jackson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GSS 04-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SLC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 12
BJ034300
                            REFERENCE
                                                                                                                                                                                                           LOCUS
                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q
                                                                                                  SOURCE
                                                                                                                                     VERSION
                                                                                                                                                        ACCESSION
                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                C20876
                                                                                                                                                                                                                                                 RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Locus
                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                          Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity Matches 10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                 13
                                                                                                                                                                                                                                                                                                      16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           34 CACTGCACTT 25
                                                                                                                                                        sequence.
C20876
                                                                                                                                                                                                                                                                                                                                        w
                                                                                                                                                                                                                                                                                                                                                                             10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Center For Genetic Resource Information National Institute of Genetics 1111 Yata, Mishima, Shizuoka 411-8540, Japan Tel: 81-559-81-6856 Fax: 81-559-81-6855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 CACTGCACTT
       Okubo, K.
                                                                                                                   EST
                                                                                                                                   C20876.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BJ034300 NIBB Mochii normalized Xenopus neurula laevis cDNA clone XL028b09 5', mRNA sequence.
                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                             Homo sapiens
                                                                                                                                                                                          HUMGS0004943
                                                                                                                                                                                                             C20876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Expressed genes in X. laevis embryo Unpublished (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kitayama,A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Xenopus laevis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BJ034300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contact: Tadasu Shin-i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            вJ034300.1
                                                                                                  numan.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               xenopodinae; xenopus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Amphibia; Batrachia; Anura; Mesobatrachia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        African clawed frog.
                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                      CTGCACTTACC
                                                                                                                                                                                                                                                                                                                                        CTGCACTTNCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (bases 1 to 48)
tayama,A., Terasaka,C., Mochii,M., Ueno,N.,
                          (bases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tshini@genes.nig.ac.jp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                according to Nieuwkoop and Faber. Library is subtracted and was constructed by N. Garrett and A.M. Zorn, (Wellcome/CRC Institute). "

13 c 11 g 10 t 2 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /tissue_type="whole embryo"
/dev_stage="stage 15"
/note="Vector: pBSRN3; Site_1: NotI; Site_2: EcoRI; cDNAs
were oligo-dT primed and directionally cloned. Staging
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    library
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /clone="XL028b09"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /db_xref="taxon:8355"
                          1 to 49)
                                                                                                                                     GI:1621986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /clone_lib="NIBB Mochii normalized Xenopus neurula
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ∕organism="Xenopus laevis"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Metazoa; Chordata; Craniata; Vertebrata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GI:17391841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10
                                                                                                                                                                                          Human adult
                                                                                                                                                                                                                                                                                                                                       13
                                                                                                                                                                                                                                                                                                                                                                                            71.48;
                                                                                                                                                                                                                                                                                                      26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                          Score 10; DB 13;
Pred. No. 2.4e+05;
                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                        (K.Okubo)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                           49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2.4e+05;
thes 0;
                                                                                                                                                                                                           mRNA
                                                                                                                                                                                        Homo sapiens cDNA
                                                                                                                                                                                                                                                                                                                                                                                                             Length 48;
```

linear

0;

Gaps

0;

EST 23-OCT-1996

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JOURNAL COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 14
AZ481615
                                                                                                                                                                                                                                                                                                                                                                          COMMENT
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AZ4
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Human Gene Signature, 3'-directed cDNA sequence. We are not
submitting the same cDNA sequence redundantly to DDBJ since 1993.
For the abundance information of clones with this sequence in this
library and as well as in other 3'-directed libraries, see '
http://www.imcb.osaka-u.ac.jp/bodymap'. The sequences of the clones
represented by this GS sequences is also found there.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C., Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von Niederhausern,A. and Wright,D.,Weiss,R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus 1 (bases 1 to 25)
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                                      Plate: 0306
                                                                                                                                             Tél: 801 585 5606
Fax: 801 585 7177
                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                          University of Utah
University of Utah
                                                                                                                                                                                                                                                                                                                                                                  Unpublished (2000)
Contact: Robert B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mouse whole genome
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Seq primer: CGTTGTAAAACGACGGCCAGT
                                                                AZ481615.1
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                                                                                                                                                                                                                                                       Biomedical
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/dev_stage="adult"
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/db_xref="taxon:9606"
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Pred. No. 2.4e+05;
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RESULT 15
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Best Local :
                                                                                                                                                               JOURNAL
                                                                                                                                                                                                          AUTHORS
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                                                                                                                                                                                2 (bases 1 to 26)
Antonarakis, S.E.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26 bp H.sapiens trapped exon SNSA0309, x85346
                                                                                                                                                           Submitted (14-MAR-1995) S.E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GSS; chromosome 21.
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ROSsier,C., Buckler,A., Antonarakis,S.E. and McCormick,M.K.
                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostómi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 26)
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1211 Geneva, SWITZERLAND
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             purified. The sheared, adaptored mouse DNA was annealed to adaptored vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."
/db_xref="taxon:9606"
/chromosome="21"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA
                                             /organism="Homo sapiens"
                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                   Genet. 4 (8), 1305-1311 (1995)
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Pred. No. 2.7e+05;
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                                                                                                                                        Geneva, CMU,
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Perfect score:
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em_htgo_hum:*
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score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

| SOURCE<br>ORGANISM<br>REFERENCE<br>AUTHORS<br>TITLE                       | RESULT 1 AX190063 LOCUS DEFINITION ACCESSION VERSION KEYWORDS |            | C 44<br>C 45                   | c 42                 | C 40                           | ωω                            | w w          | C 34  | ად.    | C 31     | c 29<br>30                             | 28      | 26    | 24<br>25                            | 23               | 21<br>: | 19<br>20             | 18                | ىر د        | с 14<br>с 15         | 13                | 11  | 10  |         | c c 6        |          |              | 2 1                  | Result      |           |
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| ns<br>Met<br>Euth<br>I to<br>1 to<br>ids                                  | 42 fro  |            | 26<br>26                       | 25                   | 24                             | 23<br>24                      | 21<br>23     | 20    | 20     | 45<br>47 | 45                                     | 32      | 3 3 3 | ω <u>ω</u>                          | 31               | 25      | 24<br>24             | 24                | ) N<br>4. 4 | 20<br>22             | 20                | 20  | 20  | 19      | 15<br>18     | 15       | . 15         | 50<br>50             | Length      |           |
| tazoa; C<br>heria; P<br>o 50)<br>and Lea<br>contain<br>e thereo           | 4 7   |            | თთ                             | 0 0 0                | ת מ                            | 9                             | ത ത          | 00    | n on 0 | o و      | თ თ                                    | 00      | י שי  | o o                                 | 0.0              | ת ת     | თ თ                  | 0                 | ע ע         | 6 12                 |                   | ט ס | 4 0 |         | 12           | 000      | ת מ          | თთ                   | DB          |           |
| hordata; Craniata;<br>rimates; Catarrhin<br>ch,M.<br>ing single nucleot   | 50 bp DNA<br>Patent WO0147942.                                | ALIGNMENTS | 378<br>108                     | AX042600<br>AX201537 | 974<br>477                     | 945<br>904                    | 27           | 5.4   | , N    | 9,6      | AR083218<br>AR083219 .                 | 5719    |       |                                     |                  |         | AR197992<br>AX190945 |                   | A47937      | AB068080<br>AX180631 | 8604              | 1.0 |     | X027079 | $\sim 1.1$   | AR132395 | × -1         | AX190063<br>AX190065 | ID          | SUMMARIES |
| Vertebrata; Euteleostomi;<br>i; Hominidae; Homo.<br>ide polymorphisms and | linear PAT 08-AUG-2001  |            | 37879 Sequenc<br>10848 Sequenc | 537                  | 97458 Seguenc<br>47309 Seguenc | 945 Sequence<br>90423 Sequenc | equence      | guenc | quenc  | guenc    | AR083218 Sequence<br>AR083219 Sequence | ience 3 | ience | AR091787 Sequence AX248592 Sequence | odnenć<br>Suanba | quenc   | equenc               | AR176982 Sequençe | lence       | equ.                 | AX298604 Sequence | ď.  | gue | quence  | guenc        | equenc   | quenc        | guen                 | Description |           |

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(bases I to 15)
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(vogelstein, B., Kinzler, K.W., Zhang, L. and Zhou, W. Gene expression profiles in normal and cancer cells patent: US 6333152-A 48 25-DEC-2001;
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Shimkets,R.A. and Leach,M.
Nucleic acids containing single nucleotide polymorph methods of use thereof patent: WO 0147942-A 244 05-JUL-2001; Curagen Corporation (US)
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Corporation (US)
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/db_xref="taxon:9606"
/note="2 of 2 allelic variants
25. . .26
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14 CAGGTGTAGACC 3
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1 CCAGGTGTAGNCC 13
                                                                                                                           l (bases 1 to 15)
Stinchcomb, D.T., Jarvis, T. and McSwiggen, J.
Nucleic acid based inhibition of CD40
Patent: US 6194150-A 820 27-FEB-2001;
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                               Similarity
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Sequence
AR132396
                                                                                                                                                           Submitted (04-AUG-2001) Akira Horii, Tohoku University School of Medicine, Molecular Pathology; 2-1 Seiryomachi, Aoba-ku, Sendai, Miyadi 980-8575, Japan (E-mail:horii@mail.cc.tohoku.ac.jp, Tel:81-22-717-8042, Fax:81-22-717-8047)
                                                                                                                                                                                                                                                 and Soeda,E.

A BAC-based STS-content map spanning a 35-Mb region of chromosome 1p35-p36
Genomics 74 (1), 55-70 (2001)
                                                                                                                                                                                                                                                                                                    Chen,Y.Z., Hayashi,Y., Wu,J.G., Takaoka,E., Maekawa,K., Watanabe,N., Inazawa,J., Hosoda,F., Arai,Y., Mizushima,H. Morohashi,A., Ohira,M., Nakagawara,A., Liu,S., Hoshi,M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Stinchcomb, D.T., Jarvis, T. and McSwiggen, J. Nucleic acid based inhibition of CD40 Patent: US 6194150-A 821 27-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                 synthetic construct DNA synthetic construct
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l (bases 1 to
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   Conservative
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                                                   sts-stSG27405 obtained from clones B313L13, B244M15, BAC library RPCI-11"

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                                                                                                                           organism="synthetic construct"
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Query Match
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Sequence
AX027079
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Bovine DNA, microsatellite DIK015
D44507
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                                                                                                                                      Anım. Genet.
97083737
                                                                                                                                                                                      Hirano,T., Nakane,S., Mizoshita,K., Yamakuchi,H.,
Inoue-Murayama,M., Watanabe,T., Barendse,W. and Sugimoto,Y.
Characterization of 42 highly polymorphic bovine microsatellite.
                                                                                                                                                                                                                                                                             Inoue, M., Hirano, T., Nakane, S., Watanabe, T., Takeda, H., Yamakkohi, H., Morita, M., Barendse, W. and Sugimoto, Y. Five bovine polymorphic dinucleotide microsatellite loci DIK010, DIK015, DIK016 and DIK020)
Anim. Genet. 26 (6), 447-448 (1995)
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Bonthron,D. and Markham,A.F.
Wound healing and orofacial clefting
Patent: WO 0040719-A 37 13-JUL-2000;
BONTHRON DAVID (GB); UNIV LEEDS (GB
              Unpublished
                                                                Inoue,M., Watanabe,T., Hirano,T., Yamakuchi,H., Tsukazawa,H., Watanabe,E., Morita,M. and Sugimoto,Y.
Isolation of microsatellites from Japanese black cattle (Wagyu) and
                                                                                                                                                                                                                                                                  96151440
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae
                                   exclusion
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/ob_xref="taxon:9606"
/note="Oligonucleotide Primer"
/ c 5 g 3 t
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Pred. No. 2.8e+05;
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AR146442
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AR099541
AR099541.1
                             Sharpe,A.H., Borriello,F., Freeman,G.J.
B7-1 and B7-2 polypeptides
Patent: US 6218510-A 61 17-APR-2001;
Location/Qualifiers
                                                                                                                                  AR146442
Sequence 61 from patent US
AR146442
AR146442.1 GI:15109631
                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 20)
Bennett, C. Frank. and Vickers, T.A.
Oligonucleotide compositions and methods
expression of B7 protein
Patent: US 6077833-A 68 20-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (21-DEC-1994) Yoshikazu Sugimoto, Japan Live Technology Association, Shirakawa Institute of Animal G Nishigo Odakura, Nishishirakawa, Fukushima 961, Japan (E-mail:LDI03222@niftyserve.or.jp, Tel:0248-25-5641,
                                                                                                   Unknown
                                                                                                             Unknown.
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                                                                                        Unclassified
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/db_xref="taxon:9913"
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 /organism="unknown"
6 c 5 g
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84.6%;
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Pred. No. 2.8e+05;
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Sequence
AX298604
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Sequence
AR178822
                                                                                                                                                             Li,X., Ohmen,J.D., Reed,D.R., Ross,D. & Gene and sequence variation associated compounds and other sweeteners Patent: WO 0183749-A 238 08-NOV-2001;
                                                                                                                                                                                                                                                                      Mus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              l (bases 1 to 20)

Bennett, C. Frank. and Vickers, T.A.
Oligonucleotide compositions and methods
expression of B7 protein
Patent: US 6319906-A 68 20-NOV-2001;
                                                                                                                                                                                                     Bachmanov,A.A., Beauchamp,G.K., Chatterjee,A., de Jong,P.J., Li,S., Li,X., Ohmen,J.D., Reed,D.R., Ross,D. and Tordoff,M.G.
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                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unclassified
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                                                               /organism="Mus sp."
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7 c 5 g
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CAGATGTAGACCA 16

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Submitted (04-AUG-2001) Akira Horii, Tohoku University School of Medicine, Molecular Pathology; 2-1 Seiryomachi, Aoba-ku, Sendai, Miyagi 980-8575, Japan (E-mail:horii@mail.cc.tohoku.ac.jp, Tel:81-22-717-8042, Fax:81-22-717-8047)
                                                                               Patent: WO 0146391-A 209 28-JUN-2001;
Plant Bioscience Limited (GB)
Location/Qualifiers
                                                                                                                                                           synthetic construct.
synthetic construct
artificial sequences.
1 (bases 1 to 22)
Osbourn, A.E., Haralampidis, K. and Bryan, G.T.
                                                                                                                                                                                                                                                            AX180631 22 bp
Sequence 209 from Patent W00146391.
AX180631 GI:15132517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A BAC-based STS-content map spanning a 35-Mb region of human chromosome 1p35-p36 Genomics 74 (1), 55-70 (2001) 21269192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chen,Y.Z., Hayashi,Y., Wu,J.G., Takaoka,E., Maekawa,K., Watanabe,N., Inazawa,J., Hosoda,F., Arai,Y., Mizushima,H., Waranabe,N., Ohira,M., Nakagawara,A., Liu,S., Hoshi,M., Horii,A.
                                                                                                                                 Plant gene
Patent: WO
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sts-R272C15F obtained from clones B359F10, B272C15,
B91D18, Human BAC library RPCI-11"
a 4 c 6 g 6 t
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/db_xref="taxon:32630"
/note="primer" 4 g 7 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="synthetic construct"
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Pred. No. 2.8e+05;
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Search completed: June 21, 2003, Job time: 285.094 secs
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/SIDS2/gcgdata/geneseq/geneseqn-emb1/NA1986.DAT:*
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AAH90364
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AAI31182
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Human colon cancer
Human single nucle
Mouse B7-1 hammerh
Mouse B7-1 hammerh
Human SLC18A2 alle
PCR primer for Hum
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                                                                                                                 Human clone cg4398
Human clone cg4398
Tag sequence of a
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| 77777  | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,  |   | 11111111   | 74  |
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| 45<br>45<br>47   | 30<br>32<br>33<br>33<br>35  | 27<br>27<br>27<br>29  | 222220   | 118<br>20<br>20<br>20<br>20<br>20   |
| 16<br>20<br>20<br>20   | 18<br>122<br>19<br>19   | 18<br>18<br>19<br>24  | 24<br>17<br>17<br>21<br>21   | 21<br>24<br>16<br>19<br>21<br>22<br>24  |
| AAQ9419<br>AAX9823<br>AAA5322<br>AAX1586<br>AAX1586  | AAT9715<br>AAI3018<br>AAI3344<br>AAI7147<br>AAX8940<br>AAV1710<br>AAO9419                                       | AATS AAX3 AAT6 AAV5   | AAS97628<br>ABL44107<br>ABL45384<br>AAT11220<br>AAV21625<br>AAAS9964<br>AAS9964  | AAA52824 ABL43601 AAA58857 AAT01071 AAV48029 AAA91878 AAF23148 AAF23148 AAF23148 AAF32871 AAD34980  |
| 4196<br>8230<br>3225<br>5861<br>5863   | 7150<br>0183<br>0183<br>1477<br>1477<br>19404<br>7107   | 4014<br>6989<br>4310<br>5516<br>5986<br>5428  | 7628<br>4107<br>4107<br>1220<br>1625<br>9815   | 52824<br>13601<br>58857<br>511071<br>5129<br>118029<br>91878<br>91878<br>12871<br>12871   |
|  |   |   | •  |   |
|  | •   |   |  |   |
|  |   |   |  |   |
| Tra<br>Nuc<br>Hum<br>PCR   | Tr. CCC   | MA Pr - Ol Hu   | Huu Huu Oa   | Hu<br>Ol<br>An<br>Ol<br>Hu  |
| Transmembrane of Transmembrane of Nucleotide seques of PCR primer used PCR primer used   | primer S1 for 6b p Human single nucle MAD chmint5 light Human pax protein Downstream PCR pri CLK serine/threoni | Mycobacteria 168- Human gene specif Human oestrogen r Oligonucleotide 3 C-mpl receptor ag Primer 35-5 for Matrix metallobro | Murine SAC1 gene-s Human chromosome 1 Human chromosome 2 Internal control p Human patched (ptc PCR primer for thr Oat Beta-amyrin sy | Human CD44 antisen Human chromosome 1 Oligonucleotide us Mouse B7-1 (altern Murine B7-1 target Antisense primer to Oligonucleotide fo Oligonucleotide fo Murine B7-1 mRNA a Murine B7-1 mRNA a memberase reverse reserved.  |
| smembra<br>eotide<br>n G-pro<br>primer<br>primer   | S1 fi<br>singl<br>lint5<br>lint5<br>lint5<br>leam<br>'ine/  | rene<br>lene<br>lcleo<br>lcleo<br>35-5  | SAC1 hrom hrom hrom co l co latch mer a-am   | CD44 a chroma hucleo B7-1 B7-1 B7-1 B7-1 B7-1 B7-1 B7-1 B7-1  |
| sequence of the sequence of th | for ob ple nicle le nicle 5 light protein protein PCR pri   | specion specion open tide   | e SACI gene<br>chromosome<br>chromosome<br>chromosome<br>nal control<br>patched (p<br>rimer for t                                    | CD44 antisen chromosome I nucleotide us B7-1 (altern B7-1 target ense primer thousented fo B7-1 mRNA a MTHER gene coras reverse   |
| to co  | b p<br>cle<br>cht<br>in<br>pri<br>pri   | oct   | b-s<br>1<br>2<br>2<br>2<br>2<br>3<br>3<br>4<br>5<br>7<br>7<br>8<br>7   | ree n get n |

## ALIGNMENTS

| AAH90362 | 0362  |
|----------|---|
| ID       | AAH90362 standard; cDNA; 50 BP.                             |
| ×        |   |
| AC       | аан90362;   |
| DT       | 08-OCT-2001 (first entry)                                   |
| ×        |   |
| DE       | Human clone cg43982025 SNP site, SEQ ID NO:242.             |
| X        |   |
| ΚW       | Human; single nucleotide polymorphism; SNP; chromosome      |
| ΚW       |   |
| ×        |   |
| SO       | Homo sapiens.   |
| ×        |   |
| H        | Key · Location/Qualifiers ·                                 |
| ΕŢ       | variation replace(2526,GCC)                                 |
| ΨŢ       | /*tag= a  |
| Ţ        | <pre>/standard_name= "single nucleotide polymorphism"</pre> |
| XX       |   |
| PN       | WO200147942-A2.   |
| ×        |   |
| PD       | 05-JUL-2001.  |
| PF >     | 27-DEC-2000; 2000WO-US35387.                                |
| XX       |   |
| PR       | 27-DEC-1999; 99US-0472865.                                  |
| PA       | (CURA-) CURAGEN CORP.                                       |
| ×        |   |
| ΡI       | Shimkets RA, Leach M;                                       |

WPI; 2001-425617/45

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RESULT 2
AAH90364
XAX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          contain silent SNPS. Sequences 569 to 580 (AAH90689-AAH90700) are consecutive pairs of nucleotides containing SNPs which result in changes in the corresponding amino acid sequences (AAG64751-AAG64762). The SNPS in sequences 569 to 574 (AAH90689-AAH90694) lead to conservative amino acid changes, while those in sequences 575 to 578 (AAH90698) result in non-conservative changes. The SNP in sequences 579 and 580 (AAH90699-AAH90700) generates a frameshift mutation. The invention also relates to a method of detercting a polymorphic site in a nucleic acid and a method of determining the relatedness of two nucleic acids. It also encompasses peptides containing polymorphic sites, antibodies ralsed against such peptides, and a method of detecting polymorphic proteins/ peptides using the antibodies. The nucleic acids are useful for gene therapy of an individual having, suspected of having, or at risk of developing a pathological condition due to the presence of a sequence wild-type nucleic acid sequence. Antibodies ralsed against polymorphic proteins/ peptides can also be used in the treatment of such individuals.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New polynucleotides containing single nucleotide polymorphisms, for detecting the presence of polymorphism, detecting a polymorphic site, and treating a patient suffering from a pathology ascribed to the
                 Shimkets RA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    contain single nucleotide polymorphisms (SNPs). Sequences 1 to 568 (AAH90121-AAH90688) are consecutive pairs of nucleotides which
                                               (CURA-) CURAGEN CORP.
                                                                                27-DEC-1999;
                                                                                                                27-DEC-2000; 2000WO-US35387
                                                                                                                                                                                       WO200147942-A2
                                                                                                                                                                                                                                                        variation
                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                         detection; identification;
                                                                                                                                                                                                                                                                                                                                                       Human; single nucleotide polymorphism; SNP; chromosome 19;
                                                                                                                                                                                                                                                                                                                                                                                        Human clone cg43982025 SNP site, SEQ ID NO:244
                                                                                                                                                                                                                                                                                                                                                                                                                          08-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAH90364;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAH90364 standard; cDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 50 BP; 9 A; 13 C; 21 G; 7 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequences AAH90121-AAH90700 represent 580 human cDNA sequences which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; Page 87; 295pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        polymorphism
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 CCAGGTGTAGNCCA 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCAGGTGCAGGCCA 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
               Leach M;
                                                                                9905-0472865
                                                                                                                                                                                                                                    Location/Qualifiers replace(25..26,CCA)
/*tag= a
                                                                                                                                                                                                                   /standard_name= "single nucleotide polymorphism"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              81.4%;
85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              50
                                                                                                                                                                                                                                                                                                                                     gene therapy; genetic disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 11.4; DB 22; Pred. No. 3.6e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              50;
                                                                                                                                                                                                                                                                                                                                         SS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
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RESULT 3
AAX30994/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              In the corresponding amino acid sequences (AAG64751.1 AAG64762). The SNPs in sequences 569 to 574 (AAH90689-AAH90694) lead to conservative amino acid changes, while those in sequences 575 to 578 (AAH90695-AAH90698) result in non-conservative changes. The SNP in sequences 579 and 580 (AAH90699-AAH90700) generates a frameshift mutation. The invention also relates to a method of detecting a polymorphic site in a nucleic acid and a method of determining the relatedness of two nucleic acids. It also encompasses peptides containing polymorphic sites, antibodies raised against such peptides, and a method of detecting polymorphic proteins/peptides using the antibodies. The nucleic acids are useful for gene therapy of an individual having, suspected of having, or at risk of developing a pathological condition due to the presence of a sequence polymorphism. Such treatment would comprise administration of the wild-type nucleic acid sequence. Antibodies raised against polymorphic polymorphic for the presence of a sequence and the presence of the sequence and the polymorphic polymor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequences AAH90121-AAH90700 represent 580 human cDNA sequences which contain single nucleotide polymorphisms (SNPs). Sequences 1 to 568 (AAH90121-AAH90688) are consecutive pairs of nucleotides which contain silent SNPs. Sequences 569 to 580 (AAH90689-AAH90700) are consecutive pairs of nucleotides containing SNPs which result in changes in the corresponding amino acid sequences (AAG64751-AAG64762). The SNPs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New polynucleotides containing single nucleotide polymorphisms, for detecting the presence of polymorphism, detecting a polymorphic site, and treating a patient suffering from a pathology ascribed to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tag sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-MAY-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX30994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX30994 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; Page 87;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            polymorphism
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-425617/45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18 CCAGGTGCAGGCCA 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 CCAGGTGTAGNCCA 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               l Similarity
12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               can also be used in the treatment of such
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             of a transcript increased in colorectal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9 A; 13 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           295pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81.4%;
85:7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21 G; 7 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 11.4; DB 27
Pred. No. 3.6e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 individuals.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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0;

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Use of isolated gene transcripts - useful for developing products for the diagnosis, prognosis and treatment of cancers, particularly colon and pancreatic cancer
                                                                                                                                                                                                                                                                                                                                                                                                         diagnosis;
                                                                                 WPI; 1999-070161/06
                                                                                                                                                                                                         21-MAY-1997;
                                                                                                                                                                                                                                              20-MAY-1998;
                                                                                                                                                                                                                                                                                      26-NOV-1998
                                                                                                                                                                                                                                                                                                                              W09853319-A2
                                                                                                                                                               (UYJO ) UNIV JOHNS HOPKINS
                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                         XW.
                                                                                                                                                                                                                                                                                                                                                                                                         prognosis; treatment;
                                                                                                                       Vogelstein B;
                                                                                                                                                                                                         97US-0047352
                                                                                                                                                                                                                                                98WO-US10277
                                                                                                                                                                                                                                                                                                                                                                                                            pancreatic cancer; ss.
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Tag sequence; colorectal cancer;

colon cancer;

Claim 2;

Page 24; 120pp;

English.

tag sequences of transcripts that

В ρ AAX30947-31815

B Qy

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RESULT 4
ABK31947,
ID ABK3
 \begin{array}{c} \mathsf{X} \times \mathsf{X} \\ \mathsf{X} \times \mathsf
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local :
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                                                                                            that has the same sequence as a mRNA found in humans and is a SAGE (serial analysis of gene expression) tag comprising a single stranded probe containing at 10 consecutive nucleotides. SAGE tags, are diagnostic and prognostic markers of cancer, especially of the colon and pancreas. ABK31900-ABK32770 represent human colon and pancreatic cancer SAGE tags of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Column 15; 161pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New human nucleic acid diagnostic markers for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-153821/20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cancer marker;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      serial
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABK31947 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    diagnosis, prognosis and treatment of cancer
                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to an isolated, purified human nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Vogelstein B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (UYJO ) UNIV JOHNS HOPKINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-MAY-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            colon cancer; colorectal cancer; pancreatic cancer; SAGE tag;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ω
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGTGTAGCCCA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGTGTAGNCCA 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP; 3 A; 5 C; 3 G; 4 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kinzler
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Pred.
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also derived
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zhou
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SAGE tags,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  useful as
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Sequence 15

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AAI31182/c
ID AAI31:
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Best Local S
Matches 11
                                   Matches
                                                   Best Local
                                                                    Query Match
                                                                                                                                                                   The invention relates to the identification of nucleic acid molecules (AAI29513-AAI31314) from the human genome which include polymorphic sites which can predispose individuals to disease. Various genes from a number of individuals were resequenced and single nucleotide polymorphisms (SNPs) in these genes discovered. The method is useful for predicting the presence, absence or severity of a particular phenotype or disorder (e.g. diabetes) associated with a particular genotype. The nucleic acids
                                                                                                                                                                                                                                                                                                                                                  sites, useful in methods for predicting the presence, absence severity of a particular phenotype or disorder (e.g. diabetes) associated with a particular genotype
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-MAR-2000;
22-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; resequence; single nucleotide |
                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAI31182;
                                                                                                                                                                                                                                                                                                             Claim 1; Page 132; 145pp;
                                                                                                                                                                                                                                                                                                                                               associated with a particular genotype
                                                                                                                                                                                                                                                                                                                                                                                                 Nucleic acid molecules from the human genome which include polymorphic
                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-522952/57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cargill M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-MAR-2001; 2001WO-US07268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13-SEP-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200166800-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAI31182 standard; DNA; 31 BP
                                                                                                                                                      containing the polymorphic sites may be useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (WHED)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Variation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14 AGGTGTAGCCCA 3
                                   11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WHITEHEAD INST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                   Similarity
CAGGTGTAGNCC
                                                                                                       3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ireland
                                                                                                      BP;
                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000US-0187510
2000US-0206129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nucleotide polymorphism (SNP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                      8 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                replace(16,T)
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /standard_name= "single nucleotide polymorphism"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      polymorphism; SNP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    genotype; disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JS,
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91.7%;
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                                                                     78.6%;
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                                                                                                       9
                                                                                                                                                                                                                                                                                                             English.
                                                                                                    G; 6 T; 0
                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 11;
Pred. No.
                                                   Pred. No.
                                                                     Score 11;
                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SS
                                                                                                      other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    forensic; paternity testing;
                                                   6e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5.8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB
                                                                     DВ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        255
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                                                                                                                                                        in
                                                                Length 31,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                        forensics
                                   Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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CCAGGTGAAGTCC CCAGGTGTAGNCC Matches

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Conservative

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Mismatches

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Indels

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The present invention describes a novel enzymatic nucleic acid (ENA) CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose CC residues; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least ten 2'-C-methyl modification; and (iv) a 3'-end modification. CC The ENA's can inhibit collagenase and stromelysin production in the CC synovial membrane of joints for the treatment or prevention of arthritis, CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also cc be used to treat antigen presenting cells of a donor to induce tolerance CC in a recipient to an alloantigen of a donor. They can also be used for CC enhancing graft tolerance or for treating autoimmune disease, and for treating allergies and other inflammatory conditions. The ENA's can also be used in diagnosis. Ribozyme therapy impacts on the expression of CC expression which accompany treatment with retinoids and dexamethasone. The concentration of ribozyme required to affect a therapeutic treatment CC is lower than that required of antisense molecules, and is highly cc.
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AAX65326/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-OCT-1995;
13-DEC-1994;
23-DEC-1994;
23-DEC-1994;
17-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-APR-1995;
02-MAY-1995;
04-MAY-1995;
07-JUL-1995;
07-JUL-1995;
                                                                                                                                                                                                                                                                              Claim 10; Page 179;
                                                                                                                                                                                                                                                                                                        treatment of auto-immune diseases
                                                                                                                                                                                                                                                                                                                              Enzymatic nucleic acid molecules having
                                                                                                                                                                                                                                                                                                                                                           WPI; 1996-300653/30
                                                                                                                                                                                                                                                                                                                                                                                     Matulic-Adamic
                                                                                                                                                                                                                                                                                                                                                                                                Beigelman L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20-JUN-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              stromelysin; synovial rheumatoid arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAX65326 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-NOV-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hammerhead ribozyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Arthritic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                       (RIBO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7-JUL-1995;
7-JUL-1995;
7-AUG-1995;
                                                                                                                                                                                                                                                                                                                      the treatment of arthritis,
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                                                                                                                                                                                                                                                                                                                                                                                                                                        RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      condition;
                                                                                                                                                                                                                                                                                                                                                                                                             Gustofson J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hammerhead ribozyme target
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                                                                                                                                                                                                                                                                                                                                                                                             Karpeisky A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        94US-0363253
94US-0363254
95US-0390850
95US-0426124
95US-0434509
95US-0434509
95US-0009951
                                                                                                                                                                                                                                                                                                                                                                                                                                                              95US-0000974
95US-0512861
                                                                                                                                                                                                                                                                                                                                                                                    J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    94US-0354920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  95US-0541365
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                                                                                                                                                                                                                                                                                                                                                                                    Jarvis
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                                                                                                                                                                                                                                                                          307pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   graft tolerance;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          hairpin ribozyme; human; rabbit; mouse; coll membrane; joint; arthritis; osteoarthritis; autoimmune disease; allergy; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15
                                                                                                                                                                                                                                                                                                                                                                                           McSwiggen J, Pavco
                                                                                                                                                                                                                                                                                                                                                                                    μ;
'
                                                                                                                                                                                                                                                                             English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ВP
                                                                                                                                                                                                                                                                                                                                                                                  Thompson
                                                                                                                                                                                                                                                                                                                  s having a induction
                                                                                                                                                                                                                                                                                                                                                                            Pavco P, Structure Usman N, Burgin A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    immune
                                                                                                                                                                                                                                                                                                                  hammer-head motif - of graft tolerance of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  response;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NO:1958
                                                                                                                                                                                                                                                                                                                                                                                                           Stinchcomb DT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   target;
                                                                                                                                                                                                                                                                                                                   or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    collagenase;
                                                                                                                                                                                                                                                                                                                              used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cleavage;
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Query Match Best Local Similarity

74.3%;

Pred. Score

10.4; DB 17; No. 1.3e+04;

Length 15

Sequence

15

ВP;

w A

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other;

present invention.

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RESULT 7
ANA65327/c
ID AAX653
XX MOUSE
XX AITHRI
KW AITHRI
AAX65327/c
IN AAX65327/c
IN AITHRI
IN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20 APR 1995;
02 MAY 1995;
04 MAY 1995;
07 JUL 1995;
07 JUL 1995;
                 The ENA's can inhibit collagenase and stromelysin production in the synovial membrane of joints for the treatment or prevention of arthritis, particularly osteoarthritis or heumatoid arthritis. The ENA's can also be used to treat antigen presenting cells of a donor to induce tolerance in a recipient to an alloantigen of a donor. They can also be used for enhancing graft tolerance or for treating autoimmune disease, and for treating allergies and other inflammatory conditions. The ENA's can also be used in diagnosis. Ribozyme therapy impacts on the expression of stromelysin without introducing the non-specific effects upon gene expression which accompany treatment with retinoids and dexamethasone. The concentration of ribozyme required to affect a therapeutic treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  05-OCT-1995;
13-DEC-1994;
23-DEC-1994;
23-DEC-1994;
17-FEB-1995;
                                                                                                                                                                                                                                                                                                                                          having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least ten 2'-O-methyl modifications; and (iv) a 3'-end modification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ALLITITIC condition; graft tolerance; immune response; target; cl hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collstromelysin; synovial membrane; joint; arthritis; osteoarthritis; rheumatoid arthritis; autoimmune disease; allergy; inflammation; diagnosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 10; Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Enzymatic nucleic acid molecules having a hammer-head motif - used for the treatment of arthritis, induction of graft tolerance or treatment of auto-immune diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Beigelman L, Karpeisky A, N
Matulic-Adamic J, Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (RIBO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-AUG-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22-NOV-1995;
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  lower than that required of antisense molecules,
                                                                                                                                                                                                                                                                                                                                                                                                                                present invention describes a novel enzymatic nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1996-300653/30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ζ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        standard; RNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
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95US-0000951.
95US-0000974.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      179; 307pp; English.
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95US-0432874
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94US-0363253.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              94US-03
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  McSwiggen J, Pavco
A, Modak A, Usman N
s T, Thompson JD, W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ъ́ВР.
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specific. The present sequence is

used in the exemplification of

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RESULT 8
ABL52004/c
ID ABL520
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                       sequence (SS) of 40023 by (see ABL51954), and defined by a corresponding set of polymorphisms whose locations and identities are given in the specification; or a sequence (S2) complementary to (S1). (I) has antiinflammatory and neuroleptic activities, and can be used in gene therapy. Methods from the present invention can be used for haplotyping and genotyping the SLC18A2 gene in an individual. SLC18A2 is also known
                                                                                                                                                                                                                                                                                                   Novel genetic variants of soluble carrier family 18 (vesicular monoamine), member 2 gene useful for screening drugs to treat e.g. neuropsychiatric disorders involving monoaminergic brain
and genotyping the SLC18A2 gene in an individual. SLC18A2 is also known as the vesicular monoamine transporter (VMAT2). (1) is useful in studying the expression and function of SLC18A2, and in expressing the SLC18A2 protein for use in screening for candidate drugs to treat diseases related to SLC18A2 activity and in studying the effect of the variation on the biological activity of SLC18A2 as well as on the binding affinity of candidate drugs targeting SLC18A2 for the treatment of respiratory
                                                                                                                                                                                      The present invention describes an isolated polynucleotide (I) having a sequence (S1) comprising soluble carrier family 18 (vesicular monoamine), member 2 (SIC18A2) isogene selected from 49 isogenes with regions of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  vesicular monoamine transporter; VMAT2; polymorphic site; SNP; single nucleotide polymorphism; antiinflammatory; neuroleptic; haplotyping; genotyping; respiratory inflammatory disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABL52004;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABL52004 standard; DNA; 15
                                                                                                                                                                                                                                                     Claim 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-SEP-2000; 2000US-232895P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-SEP-2001; 2001WO-US42217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200222652-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human SLC18A2 allele specific oligonucleotide primer SEQ ID NO:52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                 (GENA-) GENAISSANCE PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     solute carrier
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                 ΑE,
                                                                                                                                                                                                                                                       Page
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                                                                                                                                                                                                                                                        15;
                                                                                                                                                                                                                                                                                                                                                                                                Han J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   disorder; monoaminergic brain system; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            'note=
                                                                                                                                                                                                                                                     183pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         74.38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     family 18
                                                                                                                                                                                                                                                                                                                                                                                                 Kliem SE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
"polymorphic site indicated by an ambiguity base"
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Pred. No. 1
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U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  member 2; SLC18A2; vesicular monoamine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                  . for screening involving monoa
                                                                                                                                                                                                                                                                                                                                                                                                 Sausker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  polymorphic site; SNP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .3e+04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DВ
                                                                                                                                                                                                                                                                                                   ening drugs to treat diseases monoaminergic brain systems
                                                                                                                                                                                                                                                                                                                                                                                                 EA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17;
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RESULT 9
AAX84480
ID AAX8
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Best Local :
                                           disease-associated mutations, also for mutagenesis), for expressing recombinant EDTRF and as source of antisense, ribozyme and peptide nucleic acids for inhibiting translation of EDIRF-derived mRNA. EDIRF is used to raise Ab (useful for detecting EDIRF, including forms with aberrant post-translational modification, for affinity purification and therapeutically) and to screen for specific modulators (e.g. peptides or
                                                                                                                                                         (i) in screening and detection assays, e.g. for chromosome mapping, tissue typing or forensic studies; (ii) in diagnosis, prognosis or monitoring clinical trials; and (iii) for treating or preventing EDIRF-related diseases (especially immune, haematopoietto, differentiative, developmental or inflammatory disease, including arthritis and psoriasis. The EDIRF coding sequence, or its fragments,
                                                                                                                                                                                                                                                             This sequence is a PCR primer for DNA encoding the embryo-derived interleukin-related factor (EDIRF) of the invention, designated human EDIRF II. The EDIRF DNA and protein sequences (and their homologues) antibodies (Ab) specific for EDIRF, and other modulators are used:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EDIRF-related disease; immune disorder; haematopoietic disorder; developmental disorder; inflammatory disease; arthritis; psoriasis; EDIRF II; PCR primer; ss.
                                                                                                                           also useful as probes and primers (for detecting related sequences and disease-associated mutations, also for mutagenesis), for expressing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 15 BP; 2 A; 5 C; 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  monoaminergic brain systems. The present sequence represents an allele specific oligonucleotide (ASO) primer for human SLC18A2, which is given
                                                                                                                                                                                                                                                                                                                                                                            Nucleic acid encoding embryo-derived interleukin-related factors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
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                                                                                                                                                                                                                                                                                                                                               Example 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MILL-) MILLENNIUM BIOTHERAPEUTICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9932632-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Embryo derived interleukin related factor; diagnosis; detection; therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PCR primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   inflammatory diseases such as neuropsychiatric disorders involving
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13 CAGGTGTGGCCCA 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                            Page 75; 116pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97US-0994890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98WO-US27068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EDIRF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    84.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     74.38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                II coding sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  G; 3 T; 1 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 10.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.3e+04;
2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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Sequence 18 BP; 4

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                                                    Matches
                                                                 Query Match
Best Local
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                          Note: The sequence has a phosphorothioate backbone and may be either oligodeoxynucleotide or a chimeric oligonucleotide containing 2'-methoxyethyl (2'-MOE) wings and a deoxy gap. The ISIS number given above corresponds to the oligodeoxynucleotide sequence.
                                                                                                                                                                                                                                The present sequence is one of a large number of antisense oligonucleotides designed to target different regions of the human CD44 mRNA. CD44 is a multifunctional human cell surface adhesion receptor. The oligonucleotides were analysed for effect on CD44 mRNA levels by quantitative real-time PCR analysis. Antisense oligonucleotides that inhibit CD44 expression can be used to treat CD44-associated conditions
                                                                                                                                                                                                                                                                                                                                                                 New antisense compound, that inhibits the expression of human cell surface adhesion receptor CD44, for treating hyperproliferative disorders and inflammatory conditions, such as cancer and rheumato
                                                                                                       Sequence
                                                                                                                                                                                          including hyperproliferative disorders, such as cancer, and inflammatory conditions, such as rheumatoid arthritis. The antisense compounds hybridise to CD44 nucleic acids, thus allowing sandwich and other assays
                                                                                                                                                                                                                                                                                                                                Claim 3; Page
                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2000-431564/37.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200035935-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                antiinflammatory; antiarthritic; CD44 antisense inhibition; hyperproliferative disorder; cancer; inflammatory disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human CD44 antisense oligonucleotide ISIS# 18713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15-SEP-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAA52824 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rheumatoid arthritis; ss.
                                                                                                                                                                                    be easily constructed.
 16
                                                  l Similarity
11; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CD44; cell surface adhesion receptor; cytostatic; antirheumatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 CAGGTGTAGNCCA 14
|||||| || |||
3 CAGGTGCAGCCCA 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                       CAGGTGTAGNCCA 14
CAGGTGTATTCCA 4
                                                                                                       18
                                                                                                       ₽₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cowsert LM;
                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                76;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98US-0213719
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                                                                                                       P
                                                                                                                                                                                                                                                                                                                                105pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  74.38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA;
                                                                                                       5 C;
                                                             74.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18
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                                                                                                    G; 3 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                             Score 10.4;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 10.4;
Pred. No. 1
                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                    0 other;
                                                             .3e+04;
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                                                                           DB
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                                                Indels
                                                                        Length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                          18;
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                                           Gaps
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RESULT 12
AAA58857/c
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                                                                                                                                                                                                                    Query Match
Best Local S
Matches 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    multiwell plates; (b) a primer designed based on the chromosome marker sequence is added to the mixture to carry out an amplification reaction; (c) a signal corresponding to the marker is detected from the resultant amplified product to specify the discrimination Nos. of the multiwell plates containing the clones having said marker sequence; (d) the order of the markers is changed so that the same discrimination Nos. succeed to the maximum in the specified discrimination Nos. to array the multiwell plates; (e) the clones in the multiwell plates of the specified discrimination Nos. are mixed respectively in each wells of longitudinal and lateral discrimination Nos. are mixed respectively in each wells of longitudinal
                                                                                                                                                                                                                                                                                                                                                                                                      and lateral directions; (f) the mixed clones are cultured and the resultant cultures are amplified by using the above primer; (g) signals are detected from the amplified products; (h) the clones in the multiwell
                                            AAA58857;
                                                                      857/c
AAA58857 standard; DNA; 19
                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                specifically
                                                                                                                                                                                                                                                                                                                               PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634 represent PCR primers for human chromosome 21q22.1, which are
                                                                                                                                                                                                                                                                                                                                                          plates are specified from the detected result; and (i) the clones are reconstituted as the positions on the chromosome and arrayed. The microarray is useful for gene analysis. ABL42957 to ABL45322 represent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in multiwell plates numbered for discrimination are mixed in each of the multiwell plates; (b) a primer designed based on the chromosome marken
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10-MAR-2000; 2000JP-0066716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JP2001321190-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human chromosome 1p36-35 PCR primer SEQ ID NO:645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (RIKA ) RIKAGAKU KENKYUSHO (GENO-) GENOTEX YG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12-MAR-2001; 2001JP-0068285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    genome; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABL43601;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2002-144136/19
                                                                                                                                                       14
                                                                                                                                                                                                                    l Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 chromosome 1p36-35; chromosome 21q22.1; genetic analysis;
                                                                                                                                                                                     CCAGGTGTAGNCC 13
                                                                                                                                                                                                                                                                                   18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 genome clones
                                                                                                                                                                                                                                                                                   BP;
                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                claimed for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                   ω
                                                                                                                                                                                                                                                                                   Α;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             528pp; Japanese.
                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                 74.3%;
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                                                                                                                                                                                                                                                                                                             use in the present invention
                                                                                                                                                                                                                                                                               7
                                                                          ВÞ
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                                                                                                                                                                                                               Score 10.4; Db 4-,
Pred. No. 1.3e+04;
Pred. hes 2;
                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                               3 T;
                                                                                                                                                                                                                                                                               0 other;
                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                            which are
                                                                                                                                                                                                                                                18;
                                                                                                                                                                                                                  0;
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20-OCT-2000

(first entry)

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RESULT 13
AAT01071
DT COS SON COS
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       oligonucleotides AAA58825-58 were used in the analysis and study of the 2g breakpoint region, in the course of the invention to identify the gene encoding a tissue repair protein. Tissue repair gene polynucleotides are useful for determining expression of mRNA in selected target tissue, e.g. for diagnosing and treating orofacial clefting. They are also useful for determining the presence
                      02-MAR-1994;
                                                                          02-MAR-1995;
                                                                                                                             08-SEP-1995
                                                                                                                                                                                    WO9523859-A2
                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                              PCR;
                                                                                                                                                                                                                                                                                                                     T-cell costimulatory molecule; B7-2; T-lymphocyte; CD28; CTI receptor; immunoglobulin; primer; polymerase chain reaction;
                                                                                                                                                                                                                                                                                                                                                                                            Mouse B7-1 (alternatively spliced form) PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              08-MAY-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAT01071;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAT01071 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                suffering from orofacial clefting. The antibodies are also useful in the diagnosis of orofacial clefting. The polynucleotide is also useful for promoting wound healing and tissue repair.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 44; 45pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   promoting wound healing and/or tissue repair
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New human and mouse nucleic acids encoding a tissue repair protein, useful for diagnosing and treating orofacial clefting, and for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Markham
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (UYLE-) UNIV LEEDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-JAN-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13-JUL-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tissue repair protein; orofacial cleftintissue repair; 2q breakpoint region; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Oligonucleotide used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA mutations in patients suffering from, or suspected to be
                                                                                                                                                                                                                                                                                              SS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000-1465983/40
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 CCAGGTGTAGNCC 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCAGGTGGAGTCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP; 4 A; 7 C; 5 G; 3 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bonthron
                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99GB-0000167
                      94US-0205697
                                                                          95WO-US02576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  74.38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          for
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
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0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 10.4;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 clefting; wound healing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ..3e+04;
2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 19;
                                                                                                                                                                                                                                                                                                                                           CTLA4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0,
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RESULT 14
AAV48029
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Best Local Similarity
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molecules
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           primers used for primary PCR were a sense primer (AAT01068) and antisense primer (AAT01070), and for secondary PCR were a sense primer (AAT01069) and antisense primer (AAT01071). cDNA fragmen were detected that encoded a B7-1 form in which the signal peptide domain was spliced directly to the IgC-like domain,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAV48029 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RT-PCR was used to amplify mouse T-cell costimulatory molecule B7-1 cDNA fragments derived from murine spleen cell RNA. The
New oligo:nucleotide(s) that modulate expression of B7 proteins - used for, e.g. controlling activation and proliferation of {\tt T} cells,
                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Murine B7-1 targetted oligonucleotide 14914.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAV48029;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           i.e. the IgV-like domain was deleted (see AAR82900). Another cDNA fragment coded for a B7-1 form in which the IgV-like domain was spliced directly to the transmembrane domain, i.e. the IgC-like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel T cell co-stimulatory molecules - corresponding to naturally occurring alternatively spliced forms of T cells co-stimulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1995-320574/41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Borriello
                                                 WPI; 1998-387783/33
                                                                                                                                                 31-DEC-1996;
                                                                                                                                                                                16-DEC-1997;
                                                                                                                                                                                                              09-JUL-1998
                                                                                                                                                                                                                                               WO9829124-A1
                                                                                                                                                                                                                                                                                                              modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                cell proliferation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 domain was deleted (see AAR82902).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (BGHM ) BRIGHAM & WOMENS HOSPITAL.
                                                                                                               (ISIS-) ISIS
                                                                                                                                                                                                                                                                                                                                                              lomo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                 mouse; B7; T cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 CCAGGTGTAGNCC 13
                                                                                  CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCAGGTGAAGTCC 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20 BP; 5 A; 6 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               or variants
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Page 43; 111pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                Vickers
                                                                                                                PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
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                                                                                                                                                 96US-0777266
                                                                                                                                                                                97WO-US23270
                                                                                                                                                                                                                                                                                                                Location/Qualifiers 1..20
                                                                                                                                                                                                                                                                            /*tag= a
/note= "Phosphorothioate linkages'
                                                                                                                                                                                                                                                                                                 /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             74.3%;
84.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                 inflammation; autoimmune disease;
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Pred. No. 1.3e+04;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cDNA fragments
                                                                                                                                                                                                                                                                                                                                                                                                                                 cell activation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
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particularly for treatment, diagnosis and prevention of inflammation

English

Example 1; Page 36;

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AAA91878/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local
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                                                The present invention relates the diagnosis of genetic susceptibility for end-stage renal disease (ESRD). The method involves analysing a polynucleotide sample for a single nucleotide polymorphism (SNP) associated with an altered susceptibility for ESRD. The method allows early detection of ESRD and hence effective delay or ideally, prevention of ESRD is made possible. The present sequence is a primer used to amplify bases 66 to 265 of human TGF bl gene. Polymorphisms the TGF bl gene are known to be a probable trigger for renal apoptosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              particularly useful for treatment and prevention of inflammation and autoimmune diseases, e.g. asthma, (juvenile) diabetes, myasthenia gravis, Grave's disease, rheumatoid arthritis, allograft rejection, psoriasis, (systemic) lupus erythematosus, multiple sclerosis, contact dermatitis, rhinitis, allergy, cancer and metastases. The oligonucleotides may also be used to manipulate T cell activation ex vivo; to determine or detect B7 protein expression; for diagnosis; as assay and purification reagents, and to study physiological roles of B7 proteins.
Sequence 20
                                                                                                                                                                                                                                                                                                                                                                                   Diagnosing genetic susceptibility for end-stage renal disease using single nucleotide polymorphisms, involves analyzing sample obtained from subject to detect genetic polymorphism in the sample polynucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-FEB-2000; 2000WO-US04251.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Antisense primer to amplify bases 66 to 265 of human TGF bl gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The oligonucleotides which specifically hybridise to B7 modulate expression (and thus {\tt T} cell activation and proliferation). This
                                                                                                                                                                                                                                                                                                                         Example 3; Page 36; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2000-549279/50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Moskowitz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200049169-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGF bl; promoter region; gene therapy; end-stage renal disease; ESRD; human; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-JAN-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (DZGE-) DZGENES LLC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24 - AUG - 2000
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BP; 6 A; 5 C; 6 G;
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84.6%;
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3 T; 0 other;
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                                                   for renal apoptosis
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Search completed: June 21, 2003, Job time: 78.7812 secs

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Scoring table:
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US-08-702-525-61

US-09-326-186B-68

US-09-326-186B-68

US-09-907-843-48

PCT-US95-02576-61

US-09-907-843-898-26

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APPLICANT: Kinzler, Kenneth
APPLICANT: Vogelstein, Bert
APPLICANT: Zhang, Lin
APPLICANT: Zhou, Wei
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                                                                                                                                       APPLICANT: Stinchcomb
APPLICANT: Jarvis, Th
APPLICANT: McSwiggen,
TITLE OF INVENTION: N
TITLE OF INVENTION: A
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NUMBER OF SEQUENCES:
                                                                                                          CORRESPONDENCE ADDRESS:
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| 45 2 US-08-495-6958-26 Sequence 26, 45 4 US-09-199-637A-123 Sequence 123, 45 5 PCT-US94-14436-25 Sequence 25, 45 5 PCT-US94-14436-25 Sequence 26, 21 4 US-09-182-145-139 Sequence 139, 23 1 US-08-129-151A-17 Sequence 17, 24 2 US-08-715-579-17 Sequence 17, 24 2 US-08-859-998-543 Sequence 17, 25 2 US-08-463-081B-19 Sequence 25, 26 2 US-08-463-081B-20 Sequence 19, 28 2 US-08-463-39DB-20 Sequence 20, 28 2 US-08-462-390B-19 Sequence 20, 28 2 US-08-862-390B-20 Sequence 20, 28 2 US-08-833-963C-4 Sequence 20, 28 3 US-08-863-074B-19 Sequence 20, 28 451-275-275-275-275-275-275-275-275-275-275  | 10                | 10               | 10                | 10                | 10                | 10                | 10                | 10                | 10                 | 10                | 10                | 10               | 10                | 10                | 10.4              | 10.4              | 10.4               | 10.4              |
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| US-08-495-658-26 US-09-199-637A-123 PCT-US94-14436-25 PCT-US94-14436-25 Sequence 26, SCT-US94-14436-25 Sequence 26, US-09-182-145-139 US-08-129-151A-17 US-08-129-151A-17 US-08-125-239-543 US-09-225-228-543 Sequence 17, US-08-463-081B-19 US-08-463-081B-19 US-08-461-379A-19 US-08-461-379A-20 US-08-462-390B-19 US-08-462-390B-20 US-08-462-390B-20 US-08-463-990B-20   | 28                | 28               | 28                | 28                | 28                | 28                | 28                | 28                | 26                 | 24                | 24                | 23               | 23                | 21                | 45                | 45                | 45                 | 45                |
| Sequence 26, Sequence 25, Sequence 25, Sequence 26, Sequence 17, Sequence 17, Sequence 543, Sequence 29, Sequence 19, Sequence 19, Sequence 20, Sequ |                   |                  |                   |                   |                   |                   |                   |                   |                    |                   |                   |                  |                   |                   |                   |                   |                    |                   |
| 126,<br>126,<br>126,<br>126,<br>127,<br>127,<br>129,<br>129,<br>120,<br>120,   | US-08-463-074B-19 | US-08-833-963C-4 | US-08-462-390B-20 | US-08-462-390B-19 | US-08-461-379A-20 | US-08-461-379A-19 | US-08-463-081B-20 | US-08-463-081B-19 | PCT-US92-06821A-25 | US-09-225-928-543 | US-08-859-998-543 | US-08-715-579-17 | US-08-129-151A-17 | US-09-182-145-139 | PCT-US94-14436-26 | PCT-US94-14436-25 | US-09-199-637A-123 | US-08-495-695B-26 |
|  | <br>19,           | 4,               | 20,               | 19,               | 20,               | 19,               | 20,               | 19,               | 25,                | 543,              | 543,              | 17,              | 17,               | 139,              | 26,               | 25,               | 123,               | 26,               |

Title:

## ALIGNMENTS

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EARLIER APPLICATION NUMBER: 60/047,352
EARLIER FILING DATE: 1997-05-21
NUMBER OF SEQ ID NOS: 871
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 48
LENGTH: 15
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: Gene Expression Profiles TITLE OF INVENTION: Cancer Cells FILE REFERENCE: 01107.74664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/081,646 CURRENT FILING DATE: 1998-05-20
ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
CITY: Los Angeles
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         48, Application US/09081646
o. 6333152
                                                                                                                                                                                                                                                   20, Application US/08585684B 5877021
                                                                                                                                                                                                             Stinchcomb, Daniel T.
                                                                                             METHOD AND REAGENT FOR THE INDUCTION OF GRAFT TOLERANCE AND REVERSAL OF IMMUNE RESPONSES 2751
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                         SOFTWARE: FASTSEQ Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/585,684B
                             FILING DATE: January 16, 1996 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Stinchcomb, Danie APPLICANT: Jarvis, Thale APPLICANT: McSwiggen, James
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/00
FILING DATE: July 7, 1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE: (213) 489-1600.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: FastSEQ Version 1.5
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES:
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                                                                                                                                                                                                                      CITY: Los Angeles
STATE: California
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TELEX: .67-3510
APPLICATION NUMBER: 6 FILING DATE: July 7,
                                                                                                          OPERATING SYSTEM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDIUM TYPE: 3.5" Diskette, 1.44 Mb MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                    ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
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                                                                                                                                                                                                                                                  E: Lyon & Lyon
633 West Fifth Street
Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Application US/08585684B
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                                                                                                          IBM P.C. DOS 5.0
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              60/000,951
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Pred. No. 1
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US-09-038-073-820
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TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 821:
SEQUENCE CHARACTERISTICS:
                                                                                  TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 8
                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/038 OF FILING DATE:
                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                               REFERENCE/DOCKET NUMBER: 21
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                                      FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                       SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
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STREET:
CITY: Lo
            STRANDEDNESS:
TOPOLOGY: li
                                                                                                                                                                            NAME: Warburg, Richard REGISTRATION NUMBER: 3
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TOPOLOGY: li
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                                                        LENGTH:
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E: California
FRY: U.S.A.
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                                                      15 base pairs
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84.6%;
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                                                                                                                                                              218/078
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Query Match

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Score 10.4;

DB 4;

Length 15;

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US-09-213-719-14/c

: Sequence 14, Application US/09213719B

: Patent No. 6150162
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                   GENERAL INFORMATION:
APPLICANT: C. Frank Bennett
APPLICANT: Lex M. Cowsert
                                                                                                                                                                                                                                                                                                                                  Matches
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Best Local :
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STREET: V.
STREET: Suite ..
STREET: Los Angeles
CITY: Los Angeles
California
T.S.A.
TITLE OF INVENTION: ANTISENSE MODULATION OF CD44 EXPRESSION.
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SEQUENCE CHARACTERISTICS:
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MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
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TOPOLOGY: li
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (213) 955-0440
67-3510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15 base pairs
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                                                                                                                                                                                                                                                                                                                                  Conservative
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Pred. No. 1.5e+03;
0; Mismatches 2;
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                                                                                       Query Match
Best Local Similarity
Matches 11; Conser
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LENGTH: 18
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Best Local
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CURRENT APPLICATION NUMBER: US/09/213,719B
CURRENT FILING DATE: 1998-12-17
NUMBER OF SEQ ID NOS: 91
                                                                                                                                                                                                                                                                                                                                                     TELEFAX: (609) 779-84 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                          NAME: Jane MUDDER: 32,257
REGISTRATION NUMBER: IS'
REFERENCE/DOCKET NUMBER: IS'
TELECOMMUNICATION INFORMATION:
(609) 779-2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: WORDPERFECT 5.1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM: MEDIUM TYPE: DISKETT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Clarence Frank Bennett APPLICANT: Timothy A. Vickers TITLE OF INVENTION: Oligonuclectic TITLE OF INVENTION: Methods for the control of the contro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 536
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET:
                                                                                                                                                                                                                                 TOPOLOGY:
                                                                                                                                                                                                                                                         STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: Law Offices of Jane Massey Licata STREET: 210 Lake Drive East, Suite 201
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>. 6077833
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2 CCAGGTGAAGTCC 14
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                                         CCAGGTGTAGNCC
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                                                                                         Conservative
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) 779-8488
- NO: 68:
                                                                                                                                                                                                                                                       Single
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84.6%;
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84.6%;
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                                                                                                             Score 10.4;
Pred. No. 1
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Pred. No. 1.5e+03;
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                                                                                         Mismatches
                                                                                                             1.5e+03;
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RESULT 9
US-08-702-525-61
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US-08-205-697A-61
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                                                                                                                                                                                                                                                                                                                                                                        Matches
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Patent No. 6218510
                                                                                                                                                                                                           GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII Text
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/205,697A
FILING DATE: 02-Mar-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: BW TELECOMMUNICATION INFORMATION: TELEPHONE: (617)227-7400
                                                                                 NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
                                                                                                                   TITLE OF INVENTION:
                                                                                                                                                  APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
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MEDIUM TYPE: Floppy disk
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CORRESPONDENCE ADDRESS:
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                                                                                                                                                                              APPLICANT:
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               COUNTRY:
                              STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TORNEY/AGEN TONNEY/AGEN TONNEY/AGEN TONNEY/AGEN E.
REGISTRATION NUMBER: 36,207
REGISTRATION NUMBER: BWI-120
                                                        STREET:
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02109-1875
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                           Massachusetts
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                                                        28 State Street
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                                                                                                                                                Freeman,
Nadler, L
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Nadler, Lee M.
                                                                                                                                                                          Sharpe, Sharpe
Borriello, Francescopaolo
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                                                                      LAHIVE & COCKFIELD
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No. 6294660el Forms of T Cell Costimulatory
Molecules and Uses Therefor
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84.6%;
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Pred. No. 1
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RESULT 11
US-09-907-843-48/c
; Sequence 48, Application US/09907843
; Patent No. 6440739
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US-09-326-186B-68
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; MOLECULE TYPE: oligonucleotide
US-08-702-525-61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Bennett, Clarence Frank
APPLICANT: Vickers, Timothy A.
                                                                                                                                                                                    Matches
                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 68
LENGTH: 20
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Best Local
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MEDIUM TYPE: Floppy disk
TOMPHTER: IBM PC compatible
TOMPHM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 08/777,266
PRIOR FILING DATE: 1996-12-31
NUMBER OF SEO ID NOS: 226
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILE REFERENCE: ISPH-0376
CURRENT APPLICATION NUMBER: US/09/326,186B
CURRENT FILING DATE: 1999-06-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Vickers, Timothy A.

TITLE OF INVENTION: Oligonucleotide Compositions and Methods for the
TITLE OF INVENTION: Modulation of the Expression of B7 Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: (617)227-5941 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                          ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                               TYPE: DNA
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (617)227-7400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 08/205,697 FILING DATE: 02-mar-1994 ATTORNEY/AGENT INFORMATION:
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                                                                                                                                 1 CCAGGTGTAGNCC 13
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l Similarity 84.6%;
ll; Conservative
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                                                                                                               CCAGGTGAAGTCC 14
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                                                                                                                                                                                                                   Score 10.4;
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Pred. No. 1
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                                                                                                                                                                            REFERENCE/DOCKET NUMBER: BWI-
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617)227-7400
TELEFAX: (617)227-5941
INFORMATION FOR SEQ ID NO: 61:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
                                                                                                                    CT-US95-02576-61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 48
LENGTH: 20
TYPE: DNA
                                                                                  Query Match
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                                                   Matches
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CURRENT FILING DATE: 2001-07-17
NUMBER OF SEQ ID NOS: 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: C. Frank Bennett
APPLICANT: 'Susan M. Freier
TITLE OF INVENTION: ANTISENSE MODULATION OF GLIOMA-ASSOCIATED ONCOGENE-2 EXPRESSION
FILE REFERENCE: RTS-0279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION: Antisense Oligonucleotide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                  TOPOLOGY: 1: MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 08/205,697 FILING DATE: 02-Mar-1994 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA:
ADDITION NUMBER: PCT/US95/02576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 65
CORRESPONDENCE ADDRESS:
ADDRESSEE: LAHIVE & COCKFIELD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              OPERATING SYSTEM: PC
SOFTWARE: ASCII Text
                                                                 Match 74.3%;
Local Similarity 84.6%;
                                                                                                                                                               STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                  NAME: Mandragouras, Amy E. REGISTRATION NUMBER: 36,20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
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                 1 CCAGGTGTAGNCC 13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60 State Street, suite 510
                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               E: Floppy disk
IBM PC compatible
                                                                                                                                                    linear
                                                                                                                                  oligonucleotide
                                                                                                                                                               single
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84.6%;
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Pred. No. 1.
                                                               Pred. No. 1.5e+03;
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                                                                                Length 20;
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US-07-998-289B-26/c
                                                                                                                                                                                                                                                                                                                                                                            ; CLONE: HSC 4325+
US-07-998-289B-26
                                                                                                                                                                              US-08-859-998-1077
                                                                                                                                                                                               RESULT 14
                                                                         Sequence 1077, Application US/08859998
Ratent No. 5994076
GENERAL INFORMATION:
APPLICANT: Chenchik, Alex
APPLICANT: Jokhadze, George
APPLICANT: Bibliashvilli, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patent No.
                                                                                                                                                                                                                                                                                                                Matches
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Best Local
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 23 base pairs
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                              TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                           IMMEDIATE SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-527-7700
TELEFAX: 212-753-6237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                  CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
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TITLE OF INVENTION:
NUMBER OF SEQUENCES:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Robinson, Joseph R
REGISTRATION NUMBER: 33,448
REFERENCE/DOCKET NUMBER: 06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/07/998,289B FILING DATE: 30-DEC-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS:
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 ADDRESSEE:
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Taylor, Martin
Heckel, David G
                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                               Heliothis virescens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
Fish & Richardson, P.C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Darby & Darby PC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           single
                                                               METHOD OF ASSAYING DIFFERENTIAL
                                                                                                                                                                                                                                                                                                                              74.3%;
                                EXPRESSION
1375
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Pred. No. 1
                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                            4; DB 3;
1.5e+03;
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Length 23;

0,;

Gaps

COMPUTER READABLE FORM: MEDIUM TYPE: Diskette

COUNTRY: U.ZIP: 94025

SD

STREET: CITY: M

Menlo Park

2200 Sand Hill Road, Suite 100

CA

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US-08-765-332-4
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OTHER INFORMATION: oligonucleotide primer
US-08-859-998-1077
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Best Local S
Matches 11
                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 4,
                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: 415-854-0875
NFORMATION FOR SEQ ID NO:
                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Field, Bret E. 87,620
REGISTRATION NUMBER: 37,620
REFERENCE/DOCKET NUMBER: 090
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-322-5070
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                           TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION: NAME: Field, Bret E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: FastSEQ for Windows Version 2.0 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
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                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES:
                              APPLICATION NUMBER: US/08/765,332 FILING DATE: 23-DEC-1996
                                                                                                                                                                                              STATE: D.C
                                                                                                                                                                                                               CITY: WASHINGTON
                                                                                                                                                                                                                                STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRANDEDNESS:
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                                                                                                                                                                                 COUNTRY:
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DEDNESS: single
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                                                                                                                                                                                                                             1100 NORTH GLEBE ROAD, 8TH FLOOR
                                                                                                                                                                                 USA
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ROSSAU, RUDI
                                                                                                                                                                                                                                                                                                                                          VAN HEUVERSWYN,
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                                                                                                                                                                                                                                                                                           SIMULTANEOUS DETECTION, IDENTIFICATION AND DIFFERENTIATION OF EUBACTERIAL TAXA USING A HYBRIDIZATION ASSAY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Windows95
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Pred. No. 1.5e+03;
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В
Search completed: June 22, 2003, 00:01:36 Job time: 18.625 secs
                                                                                    Query Match
Best Local Similarity 84.v
                                                                                                                                                                                      TOPOLOGY: lir
MOLECULE TYPE:
HYPOTHETICAL: !
                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
NAME: SADOFF, B.J.
REGISTRATION NUMBER: 36,
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                            ANTI-SENSE:
                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                TELEPHONE: 703-816-4091
                                                                                                                                                                                                                             LENGTH: 24 base pairs TYPE: nucleic acid STRANDEDNESS: single
                                                                                                                                                                                                                                                                                       TELEPHONE: 705 UT TO NO:
                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE: 24-JUN
                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: WO PCT/EP95/02452
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24-JUN-1994
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Pred. No. 1.5e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             of hits satisfying chosen parameters:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     length:
                                                                                                          is the number of results predicted by chance to have a ater than or equal to the score of the result being printed rived by analysis of the total score distribution.
                                                                 Match
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gb_est2:*
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gb_est4:*
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em_gss_mus:*
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gb_gss:*
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 AL766269 Arabidops
AZ850196 2M0151P19
. BH129921 G-6C8.f M
BE534187 601232196
AV832412 AV832412
BI154032 602871096
                                                                Description
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REFERENCE
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AL766269/c
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          AUTHORS
TITLE
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                                                                                                                             AUTHORS
  JOURNAL
                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                 Strizhov,N., Li,Y., Rosso,M. and Weisshaar,B. Direct Submission Submitted (17-JUN-2002) Weisshaar B., Max-Planck-Institut
                                            Rosso,M., Strizhov,N., Li,Y., Reiss,B., Dekker,K. and Weisshaar,B. A new Arabidopsis thaliana T-DNA mutagenised population (GABI-Kat) for flanking sequence tag based reverse genetics
                                                                                         and Weisshaar,B.
A pippline for automated high-throughput generation of FSTs (flanking sequence tags) from Arabidopsis thaliana T-DNA transformed lines
                                                                                                                                                       Arabidopsis thaliana Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
                                                                                                                                                                                  GSS.
thale cress.
                              Unpublished 3 (bases 1
                                                                                                                                                                                                   genomic survey sequence.
AL766269
AL766269.1 GI:21519402
                                                                                                                                                                                                                              AL766269
41 bp DNA linear GSS 18-JUN-2002 Arabidopsis thaliana T-DNA flanking sequence GK-209A10-014557,
                                                                                Unpublished
                                                                                                                            Strizhov, N., Li, Y., Rosso, M., Viehoever, P.,
                                                                                                                                              Rosidae; eurosids II; Brassicales; Brassicaceae; Arabidopsis
                          (bases 1 to 41)
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AA9910920
AA910920
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AZ872071
AZ628215
AI719563
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AA677571
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TA97A01Q
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AZ772618
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C21079 HUMCS000259
T93720 ye09g01.1
AU105239 AU105239
AU107231 AU107231
BM182676 fv60f03 y
N34794 yy16g04 si
BAT72618 1N0583H09
AZ772618 1N0583H09
AZ7858144 1N0390M07
AL768826 Arabidops
AZ58146 1N0369005
AZ461229 1M0267904
AZ601449 1M0419A16
AZ875800 ZM0199C0
                                                                                                                                                                                                                                                                                                                      T68434 yc42d01; s1
AZ470802 1M0285N10
AU104849 MU104849
BH233070 1006171D0
AZ1216622 gg10d07 x
AZ491277 1M034E14
AL464465 T. brucei
AZ924604 4906 Lc29
                                                                                                                                                                                                                                                                                                                                                                                             AA991123 BSBmMFSZ0
AA910920 ok87h09.s
AZ872071 ZMO185E13
AZ872071 ZMO185E13
AZ628215 1M0440N07
AI719563 as54409.x
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AA510334 vg32c11.r
BIZ59862 602971524
BH791916 SALK_0619
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R63848 yi21a09.ri
AZ346490 1M0081004
AZ832832 2M0113D06
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AZ850196
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               German Plant Genomics program designated 'GABI'. Information on line availability can be found at: http://www.mpiz-koeln.mpg.de/GABI-Kat/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Zuechtungsforschung, Carl-von-Linne-Weg 10, Koeln, 50829, Germany This sequence is recovered from the left border of the T-DNA. It indicates an insertion within the locus defined by clone f26h11. The sequences are generated at the MPI for Plant Breeding Research in the context of the GABI-Kat project. GABI-Kat is part of the
                                                        High quality sequence stop:
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                               Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C., Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von Niederhausern,A. and Wright,D.,Weiss,R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AZ850196 37 bp DNA linear GSS 2: 2M0151P19R Mouse 10kb plasmid UUGC1M library Mus musculus clone UUGC2M0151P19 R, DNA sequence.
AZ850196 AZ850196
                                                                                                                                       Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Erro
Plate: 0151 row: P column: 19
                                                                                                                                                                                                      Tel: 801 585 5606
Fax: 801 585 7177
                                                                                                                                                                                                                                                                       Rm.
                                                                                                                                                                                                                                                                                        University of Utah Genome Center University of Utah
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; I
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae;
1 (bases 1 to 37)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GSS
                                                                                                 Class: plasmid ends
                                                                                                                    Plate: 0151 row: P column: 19
Seq primer: CACACAGGAAACAGCTATGACC
                                                                                                                                                                                                                                                                                                                                 Contact: Robert B.
                                                                                                                                                                                                                                                                                                                                                    Unpublished (2000)
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                                                                                                                                                                                                                                                 USA
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/note="PCR was performed on DNA from Arabidopsis thaliana
plants (T1) which were transformed with the T-DNA from
vector pAC161. The lines contain one or more T-DNA
insertions. The DNA fragment(s) resulting from the PCR
were directly sequenced to determine the genomic sequence
flanking the insertion. Sequences displaying significant
similarity to the A. thalaina nuclear genome sequence were
processed for submission. T-DNA derived sequences were
removed"
                                                                                                                                                                                                                                                                  Biomedical Polymers Research Bldg.,
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/clone="GK-209A10-014557"
/organism="Mus musculus"
/strain="C57BL/6J"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Arabidopsis thaliana'
/strain="Columbia 0"
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91.7%;
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Pred. No. 3.1e+04;
                                                                                                                                                             Std Error: 0.00
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G-6c8.f Maize Random Small-insert clone G-6c8 both, DNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Zea mays.
Zea mays
                                                                                                                                                                            Dupont Genomics
PO Box 6104, Newark, DE 19714-6104, USA
Tel: 302 631 2638
Tel: 302 631 2638
Fax: 302 631 2607
Email: Michele.morgante@usa.dupont.com
Sequences were trimmed to include only high quality bases; and reverse reads were assembled when significant overlaps
                                                                                                                                                                                                                                                                                                                                                                                                               Meyers, B.C., Tingey, S.v. and Acceptance, distribution and transcriptional
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota: Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACC clade; Panicoideae; Andropogoneae; Zea.
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BH129921.1
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                                                                                                                                                                                                                                                                                                                                                  Contact: Morgante
                                                                                                                                                                                                                                                                                                                                                                                         elements in the maize genome Genome Res. 11 (10), 1660-1676 (2001)
                                                                                                                                     Seq primer: Ml3univ
                                                                                                                                                               detected
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                                                                                                                      shotgun
                                /organism="Zea mays"
/strain="B73"
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                 /db_xref="taxon:4577"
                                                                                              Location/Qualifiers
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84.6%;
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Genomic Library Zea
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GSS 23-JUL-2001 a mays genomic

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purified. The sheared, adaptored mouse DNA was annealed to adaptored vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance. "  7 \text{ c} 
                                                                                                                                                                                                                                                                                                                                               10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWD42 (gil47321)4 [gb]AFT29072.1), a copy-number inducible derivative of plasmid Rl. The vector was ligated with adaptors complementary to the insert adaptors and musified the character of the insert adaptors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptored DNA was purified and size-selected for a 9.5 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              musculus C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /clone="UUGC2M0151P19"
/clone_lib="Mouse 10kb plasmid UUGC1M library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /lab_host="E. Coli strain XL10-Gold, T1-resistant,
/note="Vector: PWD42nv; Purified genomic DNA from N
Length
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Tissue Procurement: Jeffrey Green M.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
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BE534187
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National Institutes of Health, Mammalian Gene Collection (MGC)
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                                                                                     Similarity
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a
                                                                                                                                                        /note="Organ: mammary; Vector: pCMV-SPORT6; Site_1: SalI; Site_2: NotI; Cloned unidirectionally. Primer: Oligo dT. Library constructed by Life Technologies. Investigator providing samples: Jeffrey Green, M.D., NIH"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="Vector: pCR-Script; Total genomic DNA; ends were polished with Pfu polymerase and cloned into pCR-Script."
                                                                                                                                                                                                                                                   /clone="IMAGE:3596038"
/clone_lib="NCI_CGAP_Mam6"
/sex="female, virgin"
/tissue_type="infiltrating ductal carcinoma'
/dev_stage="5 months"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                              /strain="FVB/N"
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/dev_stage="seedling"
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                                                                                                                                                                                                                                                                                                                                                                                                   organism="Mus musculus"
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Pred. No. 6.7e+04;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27 CCAGGTGAAGTCC
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Gilbert Smith, Ph.D.
CDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
                                                                                                                                                                                                                                                                                                                      mRNA sequence
BI154032
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Hordeum vulgare subsp. vulgare
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Pooldea;
Triticeae; Hordeum.
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vulgare leaves vegetative stage Hordeum vulgare subsp. vulgare
clone baak12m18, mRNA sequence.
                                                                                                                              NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae. 1 (bases 1 to 48)
                                                                                                                                                                                                                                                Mus musculus
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Research Institute for Bioresources
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                                                                                                                Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                  house mouse
                                                                                                                                                                                                                                                                                                       BI154032.1 GI:14614033
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          URL:http://www.rib.okayama-u.ac.jp/barley/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Email: kazsato@rib.okayama-u.ac.jp
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Hordeum vulgare subsp. vulgare"
/cultivar="Akashinriki"
/db_xref="taxon:112509"
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IMAGE:5003014 5',
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                                                                                                                                                                                                                                                                              High quality sequence start: 33
High quality sequence stop: 49.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
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National Institutes of Health, M
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BE739587.1 GI:10153579
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Plate: LLAM11038 row: p column: 23
                                                                                                                                                                                                                                                                                                                                          Plate: LLCM493 row: d column:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unpublished (1999)
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http://image.llnl.gov
                                                                                                                                                                                                                                                                                                                                                                                               CDNA Library Preparation: CLONETECH Laboratories, Inc. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can be
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Location/Qualifiers
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/strain="FVB/N-3"
/db_xref="taxon:10090"
/clone="IMAGE:5003014"
/clone_lib="NCI_CGAP_Mam2"
/tions-lib="NCI_CGAP_Mam2"
            /clone="IMAGE:3826142"
/clone_lib="NIH_MGE:58"
/clone_lib="NIH_MGE:58"
/tissue_type="hypernephroma"
/lib_host="DH10B (T1 phage-resistant)"
/note="Organ: kidney; Vector: pDNR-LIB (Clontech); Site_1:
/fil (ggcogcctcgggc); Site_2: Sil (ggccattatggcc);
Double-stranded cDNA was prepared from cell line RNA. 5'
and 3' adaptors were used in cloning as follows: 5'
adaptor sequence: 5'-CACGGCCATTATGGCC-3' and 3' adaptor
sequence: 5'-ATTCTAGAGGCCGACATG-dT(30)BN-3'
sequence: 5'-ATTCTAGAGGCCGACGCCGACATG-dT(30)BN-3'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note="Organ: mammary; Vector: pCMV-SPORT6; Site_1: Sall; Site_2: NotI; Cloned unidirectionally. Primer: Oligo dT. Library constructed by Life Technologies. Investigator
  sequence:
(where B =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               providing samples: Gilbert Smith, NIH" 10 \text{ c} 23 \text{ g} 6 t
                                                                                                                                                                                                                        /organism="Homo sapiens"
/db_xref="taxon:9606"
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/dev_stage="5 months"
/lab_host="DH10B"
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Query Match
Best Local Similarity 84.6
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1 (bases 1 to 28)
1 (clark, N., Dubuque, T., Elliston, K., Hawn, J., ..., Hillier, L., Clark, N., Dubuque, T., Elliston, G., Marra, M., Parsons, M., Hultman, M., Kucaba, T., Le, M., Lennon, G., Marra, M., Parsons, M., Hultman, M., Kucaba, T., Le, M., Lennon, G., Marra, M., Parsons, M., Tan, F., Trevaskis, E., Waterst
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y121a09.rl Soares placenta Nb2HP Homo sapiens cDNA clone
IMAGE:139864 5' similar to SP:TSC2_MOUSE Q00992 PUTATIVE REGULATORY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Source: IMAGE Consortium, LLNL This clone is available royalty-free through LLNL; IMAGE Consortium (info@image.llnl.gov) for further i Trace considered overall poor quality Possible reversed clone: similarity on wrong strand
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 CCAGGTGTAGNCC 13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Washington University School of Medicine 4444 Forest Park Parkway, Box 8501, St. Louis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Wilson RK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unpublished (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rifkin,L., Rohlfing,T., Soares,M., Tan,F., Tre,R., Williamson,A., Wohldmann,P. and Wilson,R. The WashU-Merck EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Jammalia; Eutheria; Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Seq primer: M13RP1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Email: est@watson.wustl.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
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                                             double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the No and Eco RI sites of the modified p7773 vector. Library went through one round of normalization. Library
                                                                                                                                          insert size 1.35 kb (range 0.9-4.0 kb). 15/15 coloni contained inserts by PCR. This library was enriched full-length clones and was constructed by Clontech Laboratories (Palo Alto, CA)."
constructed
                                                                                                                                                                                                                                                                                                                                       /db_xref="GDB:550462"
/db_xref="taxon:9606"
/clone="IMAGE:139864"
                                                                                                                                                                                                                                                      /dev_stage="placenta obtained at birth (full term)"
                                                                                                                                                                                                                                                                                            /sex="Female"
                                                                                                                                                                                                                                                                                                                /clone_lib="Soares placenta Nb2HP"
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by Bento Soares and M.Fatima Bonaldo 8 \ g \qquad 6 \ t
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error: (
Plate: 0081 row: O column: 04
Seq primer: CACACAGGAAACAGCTATGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Islam, H., Longacre, S., Mahmoud, M., Meenen, E., Pedersen, T., Reilly, M., Rose, M., Rose, R., Stokes, R., Tingey, A., von Niederhausern, A. and Wright, D., Weiss, R.
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Location/Qualifiers
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AZ346490.1 GI:10425727
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mus musculus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Robert B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unpublished (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C
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801 585 7177
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                                                                                                                             (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pNB042 (gil4732114[gb]AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                inserts
with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to adaptored vector DNA, and transformed into chemically-competent E. coli XLIO-Gold (Stratagene) cells and selected for ampicillin resistance."
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                                                                                                                                                                                                                                                                                                                                                                                                                      /note="Vector: PWD42nv; Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /clone_lib="Mouse 10kb plasmid UUGC1M library"
/sex="Male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Mus musculus"
/strain="C57BL/6J"
                                                                                                                                                                                                                                                                                                                                                                                                     Laboratory Mouse DNA Resource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /clone="UUGC1M0081004"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   'lab_host="E. Coli strain XL10-Gold, T1-resistant, F-"
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90.9%;
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RESULT 10
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ORGANISM
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23 CAGGTGTAGTC 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Robert B. University of Utah University of Utah
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      High quality sequence stop: 43.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Insert Length: 10000 Std Error: (
Plate: 0113 row: D column: 06
Seq primer: CACACAGGAAACAGCTATGACC
Class: plasmid ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unpublished (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 (bases 1 to 43)
Dunn,D., Aoyagi,A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2M0113D06R Mouse 10kb plasmid UUGCC1M library Musclone UUGC2M0113D06 R, DNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tel: 801 585 5606
Fax: 801 585 7177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    plasmid inserts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mouse whole genome scaffolding with paired end reads from 10kb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ,M., Rose,M., Rose,R.
and Wright,D.,Weiss,R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ISlam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von Niederhausern,A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mammalia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ddunn@genetics.utah.edu
              adaptored vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."
                                                                                                                        was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pwp42 (g1147321141gb1AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated
                                                                                                                                                                                                                                                                                                                  (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through 0.005 inch orifice at constant velocity. The sheared DNA
                                                                                                                                                                                                                                                                                                                                                                                                             /lab_host="E. Coli strain XL10-Gold, Tl-resistant, F-"
/note="Vector: PWD42nv; Purified genomic DNA from M.
musculus C57BL/6J (male) was obtained from the Jackson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Mus musculus"
/strain="C57BL/GJ"
/db_xref="taxon:10090"
/clone="UUGC2M0113D06"
/clone_lib="Mouse 10kb plasmid UUGCIM library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Biomedical
                                                                                  with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was anneale
                                                                                                                                                                                                                                                                                                                                                                                          Laboratory Mouse DNA Resource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /sex="Male"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GI:13002740
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Polymers Research Bldg.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 10; DB 17;
Pred. No. 1.1e+05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Std Error: 0.00
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Duval, B., Hamil, C
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JOURNAL
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                                                                                                                                                                                                                           Local
                                                                         13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information. Trace considered overall poor quality
Possible reversed clone: similarity on wrong strand seq primer: -40m13 fwd. EF from Amersham High quality sequence stop: 1.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hillier,L., Allen,M., Bowles,L., Dubuque,T., Geisel,G., Jost,S., Krizman,D., Kucaba,T., Lacy,M., Le,N., Lennon,G., Marra,M., Mart,J., Moore,B., Schellenberg,K., Steptoe,M., Tan,F., Theising,B.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AA677571

46 bp mRNA linear EST 19-DEC-1997
zj66f03.sl Soares_fetal_liver_spleen_lNFLS_S1 Homo sapiens cDNA
clone_IMAGE:455261 3' similar to TR:G535185 G535185 FIBRINOGEN-LIKE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Washington University School of Medicine 4444 Forest Park Parkway, Box 8501, St. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               White,Y., Wylie,T., WaterstowashU-NCI human EST Project
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Email: est@watson.wustl.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Wilson RK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /lab_host="DH10B (ampicillin resistant)"
//note="Organ: Liver and Spleen; Vector: pT7T3D (Pharmacia)
//note="Organ: Liver and Spleen; Vector: pT7T3D (Pharmacia)
//note="Organ: Liver and Spleen; Vector: pT7T3D (Pharmacia)
//note="Organ: Liver and Spleen; Vector and Spleen; Vector
                                                                                                                                                                                                                                                                                                                                              constructed by Bento Soares and M.Fatima Bonaldo." 6 c 9 g 15 t
                                                                                                                                                                                                                                                                                                                                                                                                             double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Pac I and cloned into the Pac I and Eco RI sites of the modified pTTT3 vector. Library went through one round of normalization. Library
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /dev_stage="20 week-post conception fetus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /clone_lib="Soares_fetal_liver_spleen_1NFLS_S1"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/db_xref="taxon:9606"
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100.0%;
                                                                                                                                                                                                                           100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Waterston, R. and Wilson, R.
                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                           Score 10;
Pred. No.
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Pred. No.
                                                                                                                                                                                               Mismatches
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                                                                                                                                                                                           1.2e+05;
hes 0;
                                                                                                                                                                                                                                                        DB 9;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1st strand cDNA was primed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                        Length 46;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 43;
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                                                                                                                                                                                           0;
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                                                               RESULT 13
BI259862/c
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BI259862 31\ bp m 602971524 \mbox{Fl NIH\_MGC\_12} Homo sapiens
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В δõ

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DEFINITION

mRNA linear EST 17-JUL-2001 s cDNA clone IMAGE:5111260 5',

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Query Match
                                                                                                                             Local
16
                        1 CCAGGTGTAGNCCA 14
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4444 Forest Park Parkway, Box 8501, St. L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                High quality sequence stop:
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Trace considered overall poor quality
Possible reversed clone: similarity on wrong strand
Seq primer: -28ml3 rev2 ET from Amersham
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unpublished (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Theising, B., Wylie, T., Lennon, G., Soares, B., Wilson, R. and Waterston, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dul
Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M.,
Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AA510334 28 bp mRNA linear EST 08-JUL-1997 vg32cl1:r1 Soares_mammary_gland_NbMMG Mus musculus cDNA clone IMAGE:863060 5' similar to SW:OST4_CHICK P48440 OLIGOSACCHARYL TRANSFERASE 48 KD SUBUNIT ; mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tel: 314 286 1800 Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Contact: Marra M/Mouse EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The WashU-HHMI Mouse EST Project
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus musculus
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                                                                                                  Conservative
                                                                                                                                                                                                                                constructed a Bonaldo."
                                                                                                                                                                                                                                                                          the Not I and Eco RI sites of the modified pT7T3 vecto RNA provided by Dr. Minoru Ko, Wayne State Univ. Librar constructed and normalized by Bento Soares and M.Fatima
                                                                                                                                                                                                                                                                                                                                                          adaptors (Pharmacia),
                                                                                                                                                                                                                                                                                                                                                                                                                                     RI; 1st strand cDNA was primed with a primer [5'
                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="Organ: mammary gland; Vector: pT7T3D-Pac (Pharmacia /note="Organ: mammary gland; Vector: pT7T3D-Pac (Pharmacia ) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; 1st strand cDNA was primed with a Not I - oligo(dT)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /tissue_type="mammary gland"
/dev_stage="4 weeks"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                             /clone_lib="Soares_mammary_gland_NbMMG"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="IMAGE:863060"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Mus musculus"
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                                                                                                                          70.0%;
                                                                                                                                                                                                                                                                                                                                                        double-stranded cDNA was ligated to Eco RI (Pharmacia), digested with Not I and cloned into
                                                                                                  0;
                                                                                                                        Score 9.8; DB 9; Pred. No. 1.4e+05;
                                                                                                                                                                                                                          6 g
                                                                                                Mismatches
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                                                                                                                                                                                                                                                                                                     the modified pT7T3 vector.
Wavne State Univ. Library
                                                                                                                                                Length 28;
                                                                                                  Indels
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RESULT 14
BH791916
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KEYWORDS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local
Arabidopsis Genome
Unpublished (2001)
Contact: Joseph R. Ecker
Salk Institute Genomic Analysis Laboratory (SIGnAL)
The Salk Institute for Biological Studies
10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
Tel: 858 453 4100 x1752
                                                                                                                        Alonso,J.M., Leisse,T.J., Barajas,P., Chen,H.,,C., Jeske,A., Karnes,M., Kim,C.J., Parker,H., Zimmerman,J. and Ecker,J.R.

A Sequence-Indexed Library of Insertion Mutatic
                                                                                                                                                                                                                                                                                                                                                               SALK_061994.25.20.x Arabidopsis thaliana TDNA insertion Arabidopsis thaliana genomic clone SALK_061994.25.20.x,
                                                                                                                                                                                                                   Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosidae; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
                                                                                                                                                                                                                                                                                                                BH7,91916.1
GSS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                            Arabidopsis thaliana
                                                                                                                                                                                                                                                                                             thale cress.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 http://image.llnl.gov
Plate: LLAM11269 row: o column:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: Robert Strausberg,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unpublished (1999)
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cDNA Library Preparation: Life Technologies, Inc. cDNA Library Arrayed by: Incyte Genomics, Inc. DNA Sequencing by: Incyte Genomics, Inc. DNA Genemation: MGC clone distribution information
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCAGGAGGAGGCCA 10
                                                                                                                                                                                                    (bases 1 to 42)
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/clone_lib="NIH_MGC_12"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /tissue_type="cervical carcinoma cell line"
/lab_host="DH10B"
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                                                                                                                                                                                                                                                                                                                                 GI:19886386
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78.6%;
                                                                                                                              Library of Insertion Mutations in the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 9.8;
Pred. No. 1.
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                                                                                                                                                              Cheuk, R., Gadrinab
Prednis, L., Shinn, P
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                                                                                                                                     High quality sequence stop: 44
Location/Qualifiers
                                                                                                                                                                        Seq primer: CGTTGTAAAACGACGGCCAGT Class: plasmid ends
                                                                                                                                                                                                        Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Erro
Plate: 0367 row: B column: 0
                                                                                                                                                                                                                                                                                                                                University of Utah
University of Utah
                                                                                                                                                                                                                                                                                                                                                                                                     plasmid inserts
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                                                                                                                                                                                                                                                                                                                                                                                  Unpublished (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                   Mouse whole genome scaffolding with paired
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mammalia;
                                                                                                                                                                                                                                                                                                                                                                  Contact: Robert B.
                                                                                                                                                                                                                                                                                                                                                                                                                                     and Wright,D.,Weiss,R.
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                                                                                                                                                                                                                                                                                                              Biomedical Polymers Research Bldg.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /clone_lib="Arabidopsis thaliana TDNA insertion lines"
/note="PCR was performed on Arabidopsis thaliana lines
each of which contains one or more TDNA insertion
elements. The resultant fragment for each line was
/lab_host="E.
                /clone_lib="Mouse 10kb plasmid UUGC1M library"
/sex="Male"
                                                  /db_xref="taxon:10090"
/clone="UUGC1M0367B06"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /clone="SALK_061994.25.20.x"
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/db_xref="taxon:3702"
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/strain="Columbia 0"
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                                                                                     /strain="C57BL/6J"
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S., Mahmoud, M., Meenen, E.,
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Search completed: June 21, 2003, 23:59:07 Job time: 610.901 secs
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Matches 11; Conserv
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ilarity 78.6%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                  (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWD42 (gil4732114|gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to adaptored vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="Vector: PWD42nv; Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource
                                                                                                                                                                                                                                              0;
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Pred. No. 1.5e+05;
0; Mismatches 3;
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BASE COUNT ORIGIN

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is the number of results predicted by chance to have a

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SUMMARIES

| REFERENCE<br>AUTHORS<br>TITLE<br>JOURNAL | SOURCE                          | SION         | RESULT 1 AX443826/c LOCUS DEFINITION |            | <b></b> ₽        | 43            | υμ             | 40            | ມ ພ<br>8   | 7             |               |                   | c 32          |                |                | . 1 K                          | c 26       | ) N1           | NI N         | . 1 8.1         | N) b     |              |                 |              |                 |                                | 11                | _            |                |             |               |       | ) O O                              | No. s      | +   |
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| ligonucleotides<br>281 28-FEB-2002;      | •                               | 04           | 24 bp DNA<br>tent WOO216649.         | ALIGNMENTS | E35314<br>E35315 | 37050         | 13141<br>วอรอด | 18027         | 09538  | 1961          | 5008<br>5008  |                   | 6750          | 040<br>7484    | 6750           | 707                            |            | 7891           | 67963        | 334<br>100      | 8897     | 0258         |                 |              | 3537            | )677                           | 100               | 1747         | 8729           | 713         | R13540        | 86800 | X44                                |            |     |
|  |                                 |              | linear PAT 03-JUL-2002               |            | 14 As<br>15 As   | 70507 Sequenc | 3141           | 80271 Sequenc | 95382 Sequenç                                    | 19617 Sequenç | 20086 Sequenc | AX306373 Sequence | 67500 Sequenc | 74843 Sequence | 67501          | 701 Antihuman<br>96917 Secmenc | Primer. 9/ | 078918 Sequenc | 67963 Sequen | 13342 Novel pep | Chimeric | 258 Sequence | 4325 Sequence 3 | 952 Sequence | 135378 Sequence | 50160 Sequenc<br>06770 Sequenc | AR151630 Sequence | 3422 Sequenç | 729 Sequence 5 | 13 Sequence | 35409 Sequenc | 1868( | X443826 Sequenc<br>X447806 Sequenc | escription |     |

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REFÉRENCE
AUTHORS
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Newman, R.A., Hanna, N. and Raab, R.W.
Recombinant antibodies for human therapy
Patent: US 5750105-A 51 12-MAY-1998;
                                                                                                                                  Unclassified
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/db_xref="taxon:32630"
/note="Computer Generated Probe
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85.7%;
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92.3%;
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Pred. No. 5.8e+04;
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1 CAAGGTCCAGNCCA 14
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Sequence 44 from patent US
AR135409
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Recombinant antibodies for human therapy
Patent: US 5756096-A 1 26-MAY-1998;
Location/Qualifiers
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Pred. No. 5.8e+04;
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RESULT 8
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Best Local Similarity 85.7%;
Matches 12; Conservative
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Best Local Similarity
Matches 12; Conserv
                Query Match 81.4
Best Local Similarity 85.7
Matches 12; Conservative
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Newman, R.A., Hanna, N. and Raab, R.W.
Recombinant antibodies for human therapy
Patent: US 5681722-A 51 28-OCT-1997;
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Newman, R.A., Hanna, N. and Raab, R.W.

Recombinant antibodies for human therapy

Patent: US 5658570-A 5 19-AUG-1997;

Location/Qualifiers

1. .17
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Newman,R.A., Hanna,N. and Raab,R.W.

Recombinant antibodies for human therapy

Patent: US 5693780-A 5 02-DEC-1997;

Location/Qualifiers

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Sequence 51 from patent US 5681722.
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Sequence 5 from patent US 5693780.
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                                Score 11.4; DB 6;
Pred. No. 5.8e+04;
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Pred. No. 5.8e+04;
0; Mismatches 2;
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| T 11<br>630<br>ITION<br>SION<br>ON   | •                       | Query Match<br>Best Local<br>Matches 1  | SANISM<br>SANISM<br>RENCE<br>THORS<br>TLE<br>TRNAL<br>JRES<br>SOURCE<br>COUNT   | T 10 422 ITION SION ON ON  | <b>₽</b>  | Query Match<br>Best Local<br>Matches 1  | JOURNAL FEATURES SOURCE BASE COUNT ORIGIN  | SOURCE<br>ORGANISM<br>REFERENCE<br>AUTHORS<br>TITLE   | T 9 348/c ITION SION ON RDS  |                     |
| AR151630 22 bp DNA<br>Sequence 13 from patent US 6232098.<br>AR151630 AR151630.1 GI:15117680 | 1 CAAGGTCCAGNCCA 14<br> | h 81.4%; Score 11.4; DB 6; Similarity 85.7%; Pred. No. 5.7e+04; 12; Conservative 0; Mismatches 2; | Unknown.  Unknown.  Unclassified.  1 (bases 1 to 22)  1 (bases 1 to 72)  Conklin,D.C., Foster,D.C. and Gao,Z.  Kunitz domain polypeptide and materials and Patent: US 608747-A 13 11-JUL-2000;  Location/Qualifiers  1 22  /organism="unknown"  6 a 7 c 7 g 2 t | AR103422 22 bp DNA<br>Sequence 13 from patent US 6087473.<br>AR103422 AR103422.1 GI:12815010 | 1 CAAGGTCCAGNCCA 14<br>              <br>5 CCAGGTCCAGTCCA 2 | h 81.4%; Score 11.4; DB 6; Similarity 85.7%; Pred. No. 5.8e+04; 12; Conservative 0; Mismatches 2; | Patent: WO 0168682-A 16 20-SEP-2001; Large Scale Biology Corporation (US) Location/Qualifiers 118 /organism="unidentified" /db_xref="taxon:32644" /note="primer" 8 g 3 t | unidentified. unidentified unclassified. 1 (bases 1 to 18) Reinl,S.J. and Turpen,T.H. Self antigen vaccines for treating b cell cancers | AX250348 18 bp DNA<br>Sequence 16 from Patent WO0168682.<br>AX250348<br>AX250348.1 GI:15984115 | 17 CCAGGTCCAGTCCA 4 |
| linear   |                         | Length 22<br>Indels   | d methods   | linear   |   | Length 18<br>Indels   |  | lymphomas   | linear   |                     |
| PAT  |                         | 0;  | for   | PAT  |   | 0;  |  | and   | PAT  |                     |
| 08-AUG-  |                         | Gaps  | making  | 14-FEB   |   | Gaps  | :=   | other   | 05-OCT   | . <u>.</u>          |
| 2001   |                         | 0;  | <del>f</del>  |  |   | 0;  |  |   | 2001   |                     |

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Sequence
AR006770
                                                    1 (bases 1 to 26)
Newman, R.A., Hanna, N. and Raab, R.W.
Recombinant antibodies for human therapy
Patent: US 5750105-A 20 12-MAY-1998;
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Conklin,D.C., Foster,D.C. and Gao,Z.
Kunitz domain polypeptide and materials
Patent: US 6232098-A 13 15-MAY-2001;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                 Boehm, T. and Dear, N.T.
Calpain protease 12
Patent: WO 02027/5-A 19 10-JAN-2002;
BASF AKTIENGESELLSCHAFT (DE)
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/db_xref="taxon:32630"
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/ note="7 c 9 g 5 t
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Newman, R.A., Hanna, N. and Raab, R.W.
Recombinant antibodies for human the
Patent: US 5681722-A 20 28-OCT-1997;
                                                                                                                                                           Unclassified
                                                                                                                                                                                                                                                                                                                                                                                             Hanna, N., Newman, R. Anthony. and Reff, M. Elliot. Recombinant anti-CD4 antibodies for human ther Patent: US 6136310-A 13 24-OCT-2000;
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| AAA78273            | AAV61365  | AAT18053           | AAV33320  | AAT16179           | AAQ56586  | AAQ67195  | AAH47905  | AAA09964  | AAV52801  | AAT92804  | AAQ87238  | AAV05652  | AAV23762  | AAV31384           | AAT62871           | AAT92201           | AAT95124           | AAQ35905    | AAT75424  | ABA99782 | ABL55000 | AAD14335 | AAZ46336           | AAA50117 | ААН99913     | AAS12663  | AAV64442           | AAF24764  | AAS45544 | AAT43427           | AAV05683           | AAV23793 | AAV31430  | 290       | AAT91566          |
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| .Human Ig H chain s |           | Sense primer #1 am |           | Humanised antibody | in prin   | anized 13 | dy L      | for       |           | HS1 for   | н         | monke     | for Anti- | Human or monkey he | Human or monkey VH | Monkey/human heavy | Human or monkey Ig | monkey heav | for human | O        | 0        |          | Human zkun5 Kunitz | m.       | r used to am | BAX RT-PC | Mouse ada gene rev |           | C)       | VH1 family specifi | Human/monkey heavy |          |           | chain     | Cynomolgus monkey |

## ALIGNMENTS

| RESULT | RESULT 1  |
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| ID     | ABQ00274 standard; DNA; 24 BP.                      |
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| AC     | ABQ00274;   |
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| ΡŢ     | 11-JUN-2002 (first entry)                           |
| 7 >    | 011000001001140 141011010101010101010101            |
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| KW     | Oligonucleotide array; adapter sequence; probe; ss. |
| ××     |   |
| SO     | Synthetic.  |
| ××     |   |
| יי     | W0200216649-A2.                                     |
| ××     |   |
| PD     | 28-гев-2002.  |
| XX     |   |
| ЭF     | 27-AUG-2001; 2001WO-US26519.                        |
| ××     |   |
| PR     | 25-AUG-2000; 2000US-227948P.                        |
| PR     | 29-AUG-2000; 2000US-228854P.                        |
| ××     |   |
| PA     | (ILLU-) ILLUMINA INC.                               |
| ××     |   |
| Id     | Gunderson K;  |
| xx     |   |
| DR     | WPI; 2002-292068/33.                                |
|        |   |

PTXX

Array comprising adapter sequences useful for immobilizing or detecting a target nucleic acid sequence, has different addresses comprising different specific capture probes

Claim 1;

Page

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261pp;

English.

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RESULT 2
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                                   nucleic acid sequence by attaching a adapter nucleic acid (ABQ00010-ABQ13409) to a target nucleic acid to form a modified target nucleic acid and contacting the modified target nucleic acid with (I). The steps of above method is useful for detecting a target nucleic acid which further comprises detecting the presence of the modified target
                                                                                                      25 different addresses (adapter sequences) with each comprising a different capture probe selected from a group consisting of the sequences given in ABQ00010-ABQ13409. (I) is useful for immobilising a target
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29-AUG-2000; 2000US-228854P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         array; adapter sequence; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A.
                                                                                                                                                                               261pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 85.7%;
92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ω
                                                                                                                                                                                                           probes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ç;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Τ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          other;
                                                                                                                                                                                                                      immobilizing or detecting
addresses comprising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
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                                              acid,
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Sequence

24 BP;

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DT X AC

ABQ10840;

ABQ10840 standard;

DNA;

24

ВР

11-JUN-2002

(first entry)

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RESULT 3
ABQ04553
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                                                                                                                                                     SXCCCCCCCCXXXX
RESULT 4
ABQ10840/c
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                                                                                                  Matches
                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local 9
                                                                                                                                                                                  different addresses (adapter sequences) with each comprising a different addresses (adapter sequences) with each comprising a different capture probe selected from a group consisting of the sequences given in ABQ00010-ABQ13409. (I) is useful for immobilising a target nucleic acid sequence by attaching a adapter nucleic acid (ABQ00010-ABQ13409) to a target nucleic acid to form a modified target nucleic acid and contacting the modified target nucleic acid with (I). The steps of above method is useful for detecting a target nucleic acid, which further comprises detecting the presence of the modified target
                                                                                                                                                                                                                                                                                                                                           different specific capture probes
                                                                                                                                                                                                                                                                                                                                                        Array comprising adapter sequences useful for immobilizing or detecting a target nucleic acid sequence, has different addresses comprising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Oligonucleotide
                                                                                                                                                     Sequence 24 BP; 6
                                                                                                                                                                                                                                                                                          The invention relates to an oligonucleotide array (I)
                                                                                                                                                                                                                                                                                                                  Claim 1; Page 145;
                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-292068/33
                                                                                                                                                                                                                                                                                                                                                                                                                      Gunderson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-AUG-2000;
29-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200216649-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABQ04553;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABQ04553 standard;
                                                                                                                                                                              nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27-AUG-2001; 2001WO-US26519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19 CAAGGTCCAGACC
                                                  σ
                                                                        1 CAAGGTCCAGNCC
                                                                                                 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 CAAGGTCCAGNCC 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12;
                                                                                                                                                                              acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                              ILLUMINA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                  CAAGGTCCAGACC
                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000US-227948P
2000US-228854P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             array; adapter sequence; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      adapter/capture
                                                                                                                                                     A.
                                                                                                                                                                                                                                                                                                                261pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               entry)
                                                                                                                85.7%;
92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           92.3%;
                                                                                                                                                     8 C; 5
                                                                         13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24
                                                                                                                                                                                                                                                                                                                   English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ВP
                                                                                                                                                   G; 5 T; 0 other;
                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 12;
Pred. No.
                                                                                                                          Score 12;
                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                No. 2.1e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2.1e+03;
                                                                                                                            DB 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ВB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 24
                                                                                                                          Length 24
                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                           comprising at least
                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                 0;
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RESULT 5
ABQ10881
ID ABQ1
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        autrerent addresses (adapter sequences) with each comprising at least different capture probe selected from a group consisting of the sequences given in ABQ00010-ABQ13409. (I) is useful for immobilising a target nucleic acid sequence by attaching a adapter nucleic acid (ABQ00010-ABQ13409) to a target nucleic acid to form a modified target nucleic acid and contacting the modified target nucleic acid with (I). The steps of above method is useful for detecting a target nucleic acid, which further comprises detecting the presence of the modified target nucleic acid.
                                                                                                                           WO200216649-A2
                                                                                                                                                         Synthetic
                                                                                                                                                                                         Oligonucleotide
                                                                                                                                                                                                                      Oligonucleotide adapter/capture probe 10872.
                                                                                                                                                                                                                                                                                       ABQ10881;
                                                                                                                                                                                                                                                                                                                     ABQ10881 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; Page 223; 261pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Array comprising adapter sequences useful for immobilizing or detecting a target nucleic acid sequence, has different addresses comprising different specific capture probes -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gunderson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-AUG-2000;
29-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-AUG-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-FEB-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oligonucleotide array;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Oligonucleotide adapter/capture probe 10831.
                                                                                                                                                                                                                                                       11-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ILLU-) ILLUMINA
             25-AUG-2000;
29-AUG-2000;
                                                            27-AUG-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2002-292068/33
                                                                                                                                                                                                                                                                                                                                                                                                     19
                                                                                                                                                                                                                                                                                                                                                                                                                                   1 CAAGGTCCAGNCC 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12;
                                                                                                                                                                                                                                                                                                                                                                                                     CAAGGTCCAGACC 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24 BP; 5 A; 5 C; 8 G; 6 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
             2000US-227948P.
2000US-228854P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000US-227948P.
2000US-228854P.
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                                                            2001WO-US26519
                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                       array;
                                                                                                                                                                                                                                                                                                                       DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             85.7%;
92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   adapter sequence; probe;
                                                                                                                                                                                       adapter
                                                                                                                                                                                                                                                                                                                       24
                                                                                                                                                                                                                                                                                                                       ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 12;
Pred. No.
                                                                                                                                                                                       sequence; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 24;
2.1e+03;
                                                                                                                                                                                       ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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RESULT 6
ABQ12376/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCCCXXX PTTX RXCCCCCXXX
                                                                                                                                                                                                                                                                                                                                                                                      SO
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                                                                                                                                                                                                           PΑ
                                                                                                                                                                                                                                                    PR
                                                                                                                                                                                                                                                                                                                XX
                                                                                                                                                                                                                                                                                                                                            ΧX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25 different addresses (adapter sequences) with each comprising a different capture probe selected from a group consisting of the sequences given in ABQ00010-ABQ13409. (I) is useful for immobilising a target nucleic acid sequence by attaching a adapter nucleic acid (ABQ00010-ABQ13409) to a target nucleic acid to form a modified target nucleic acid and contacting the modified target nucleic acid with (I). The steps of above method is useful for detecting a target nucleic acid, which further comprises detecting the presence of the modified target
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Array comprising adapter sequences useful for immobilizing or detecting a target nucleic acid sequence, has different addresses comprising different specific capture probes
The invention relates to an oligonucleotide array (I) comprising at least 25 different addresses (adapter sequences) with each comprising a different capture probe selected from a group consisting of the sequences given in ABQ00010-ABQ13409. (I) is useful for immobilising a target
                                                                                                                   Array comprising adapter sequences useful for immobilizing or detecting a target nucleic acid sequence, has different addresses comprising
                                                                                                                                                                                           Gunderson
                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                   Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                               Oligonucleotide adapter/capture
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABQ12376 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim
                                                                         Claim
                                                                                                     different
                                                                                                                                                              WPI; 2002-292068/33
                                                                                                                                                                                                                                                                                                                                                          WO200216649-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to an oligonucleotide array (I) comprising at least
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ILLU-) ILLUMINA INC
                                                                                                                                                                                                                         (ILLU-) ILLUMINA INC
                                                                                                                                                                                                                                                      29-AUG-2000;
                                                                                                                                                                                                                                                                    25-AUG-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              further ic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 CAAGGTCCAGNCC 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAAGGTCCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24
                                                                                                     specific capture
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP; 6 A;
                                                                                                                                                                                                                                                    2000US-227948P
2000US-228854P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                2001WO-US26519
                                                                        242;
                                                                                                                                                                                                                                                                                                                                                                                                                   array; adapter sequence; probe;
                                                                     261pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        261pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      85.7%;
92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             English.
                                                                        English.
                                                                                                    probes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                               probe 12367.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .1e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
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RESULT 7
ABQ12417
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                                               Matches
                                                           Query Match
Best Local
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                              The invention relates to an oligonucleotide array (I) comprising at least 25 different addresses (adapter sequences) with each comprising a different capture probe selected from a group consisting of the sequences given in ABQ00010-ABQ13409. (I) is useful for immobilising a target nucleic acid sequence by attaching a adapter nucleic acid (ABQ00010-ABQ13409) to a target nucleic acid to form a modified target nucleic acid and contacting the modified target nucleic acid with (I). The steps of above method is useful for detecting a target nucleic acid, which further comprises detecting the presence of the modified target
                                                                                                                                                                                                                                                                                 different specific capture
                                                                                                Sequence
                                                                                                                                                                                                                                                            Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Oligonucleotide array; adapter sequence; probe; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ABQ00010-ABQ13409) to a target nucleic acid to form a modified target nucleic acid to form a modified target nucleic acid to form a modified target nucleic acid with (I). The steps of above method is useful for detecting a target nucleic acid, which further comprises detecting the presence of the modified target
                                                                                                                                                                                                                                                                                          Array comprising adapter sequences useful for immobilizing or detecting a target nucleic acid sequence, has different addresses comprising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200216649-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Oligonucleotide adapter/capture probe 12408
                                                                                                                                                                                                                                                                                                                                                                                 (ILLU-) ILLUMINA
                                                                                                                                                                                                                                                                                                                                                                                                        25-AUG-2000; 2000US-227948P
29-AUG-2000; 2000US-228854P
                                                                                                                                                                                                                                                                                                                                                                                                                                             27-AUG-2001; 2001WO-US26519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABQ12417 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20
                        1 CAAGGTCCAGNCC 13
                                                12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 CAAGGTCCAGNCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12;
                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
CAAGGTCCAGACC 19
                                                                                                25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAAGGTCCAGACC 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP; 5
                                                Conservative
                                                                                                BP; 6 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Α,
                                                                                                                                                                                                                                                         261pp; English.
                                                           85.7%;
92.3%;
                                                                                               8 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   92
2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                38;
                                                                                               5 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                 probes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ₿P
                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 12;
Pred. No.
                                                             Pred.
                                                                      Score
                                                                                               6 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    7
                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    other;
                                                                       DB 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DΒ
                                                           .1e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .1e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24;
                                               1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 25;
                                                                    Length 25;
                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                             0;
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RESULT 9
AAT95155/c
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                                                                                                                                                                                                                                               PTTTT
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AAQ35925/c
ID AAQ35925 standard;
                                                                                                                                                                                            Matches
                                                                                                                                                                                                      Query Match
Best Local :
                                                                  AAT95155 standard;
                                                                                                                                                                                                                                                                     for sequencing. The amplified sequences could be used in the production of a recombinant antibody, comprising a human, chimpanzee or old world monkey immunogalobulin (Ig) constant region and an antigen (Ag) binding portion of an old world monkey Ig varible region, where the old world monkeys may be the same or different. The recombinant antibody may be used as a therapeutic agent for the treatment of rheumatoid arthritis, eczema and immunological disorders.
              18-FEB-1998
                                                                                                                                                                                                                                                                                                                                                                             The sequences given in AAQ35925-30 represent sense primers which used to amplify cynomolyus heavy chain variable region sequences. The amplified sequences belonged to a number of different gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Recombinant antibodies including Old World monkey portion and human portion - used for treatment of auto-immune diseases, infectious diseases, AIDS, tumours, diabetes, proliferative diseases, intestinal inflammations and allergies, etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PCR; primer; region; Lambda; human; constant; antigen; recombinant; antibody; chimpanzee; Ag; old world monkey; eczema; immunoglobulin; therapeutic; rheumatoid arthritis; p-Bluescript; ss.
                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hanna
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-JUL-1991;
23-MAR-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24-JUL-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-FEB-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          W09302108-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Amplify;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human/monkey heavy chain variable region primer VH1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-JUN-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAQ35925;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (IDEC-) IDEC
                                                                                                                                       17
                                                                                                                                                                                        l Similarity
12; Conserv
                                                                                                                                                     CAAGGTCCAGNCCA 14
                                                                                                                                                                                                                                               17
                                                                                                                                     CCAGGTCCAGTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Newman RA,
                                                                                                                                                                                                                                                                                                                                                                 The amplified sequences were cloned into p-Bluescript
                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                             BP; 3 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Fig 8A;
            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PHARM CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             91US-0735064
92US-0856281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       92WO-US06194
                                                                  DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     chain reaction;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           entry)
                                                                                                                                                                                                                                             5 C;
                                                                                                                                                                                                      81.4%;
85.7%;
                                                                  17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17
                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                   English.
                                                                  ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ВP
                                                                                                                                                                                                                                             <u>د:</u>
                                                                                                                                                                                         0,
                                                                                                                                                                                                             Score 11.4;
                                                                                                                                                                                         Pred. No. 4.6
); Mismatches
                                                                                                                                                                                                                                             3 T;
                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                             other;
                                                                                                                                                                                                      .6e+03;
                                                                                                                                                                                                                    DB 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     light; chain; variable;
                                                                                                                                                                                                                Length
                                                                                                                                                                                         Indels
                                                                                                                                                                                                                    17;
                                                                                                                                                                                         0
                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                         were
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Human or monkey Ig heavy chain

variable region primer VH1

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10-JUL-1992;
25-JUL-1991;
23-MAR-1992;
                                                                                                                                constant region coding sequence.

The chimeric Ab may be used as a passive or active therapeutic for B cell lymphoma, infectious, e.g. AIDS, autoimmune and inflammatory diseases and transplant rejection. The Ab can be used in its native form or as part of an Ab/chelate, Ab/drug or Ab/toxin complex.

Additionally, a whole Ab, or a fragment (Fab2, Fab, Fv) may be used as an imaging reagent or as a potential vaccine or immunogen in active immunotherapy to generate anti-idiotypic responses. An anti-CPA recombinant Ab, or a fragment can also be used to induce immunosuppression and can therefore be used to treat or prevent resistance to, or rejection of transplanted organs or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 rheumatoid arthritis; lupus erythematosus; PCR primer; systemic lupus erythematosus; SLE; Hashimoto's thyroiditis; multiple sclerosis; myasthenia gravis; type 1 diabetes; uveitis; nephrotic syndrome; psoriasis; atopical dermatitis; contact dermatitis, eczematous dermatitides; seborrheic dermatitis; Lichen planus; Pemplugus; bullous pemphigus; Epidermolysis bullosa; urticaria; angioedemas; vasculitides; erythema; cutaneous eosinophilla; alopecia areata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              method comprises amplifying DNA from the OWM using a primer complementary to the 5' leader sequence of the OWM Ab gene a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present sequence is a PCR primer for a human or monkey immunoglobulin heavy chain variable region cDNA, which was used in the development of a novel method for producing a chimeric antibody (Ab), comprising the variable region of an Old world monkey (OWM) Ab and the constant region of a human Ab. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Production of humanised antibodies containing monkey variable region - used for the treatment of B cell lymphoma, autoimmune disease, inflammatory disease and infection, e.g. by {\tt HIV}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
Cebus apella
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       reversible obstructive airways disease; intestinal inflamma; intestinal allergy; Coeliac disease; proctitis; eosinophiligastroenteritis; mastocytosis; Crohn's disease; ulcerative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         inflammatory disease; transplant rejection; imaging reagent; vaccine; immunogen; immunotherapy; anti-idiotypic response; immunosuppression; treatment; prevention; proliferative disease; immunologically mediated disease; hyperproliferative disease; immunologically mediated disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-JAN-1995;
07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US5681722-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          human; variable region; chimeric antibody;
B cell lymphoma; infectious disease; AIDS; autoimmune disease;
inflammatory disease; transplant rejection; imaging reagent;
                                                                       hyperproliferative
                                                                                                             tissues,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         fusing the resulting variable region coding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1997-535052/49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-OCT-1997
                                 hyperproliferative diseases, cutaneous manifestations of immunologically mediated diseases (e.g. rheumatoid arthr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    World monkey; immunoglobulin; Ig; heavy chain; CD4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     related allergy; migraine; rhinitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IDEC
                                                                                                         autoimmune,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Newman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PHARM CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      91US-0735064.
92US-0856281.
95US-0379072.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8; 84pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        95US-0478039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    92US-0912292.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            95US-0478039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RΑ,
                                                                                                  inflammatory, proliferative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Raab
lupus erythematosus,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             eczema;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sequence with a human
Hashimoto's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 nal inflammation;
eosinophilia;
                                                                                                         and
                              arthritis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gene and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               colitis
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RESULT 10
AAT91566/c
QY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                 25-JUL-1991;
23-MAR-1992;
25-JAN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           dermatitis, contact dermatitis and further eczematous dermatitides, seborrheic dermatitis, Lichen planus, Pemplugus, bullous pemphigus, Epidermolysis bullosa, urticaria, angioedemas, vasculitides, erythema, cutaneous eosinophilias, alopecia areata), reversible obstructive airways disease, Intestinal inflammations and allergies (e.g. Coeliac disease, proctitis, eosinophilia gastroenteritis, mastocytosis, Crohn's disease and ulcerative gastroenteritis, mastocytosis, Crohn's disease and ulcerative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The
                               A new chimeric antibody (Ab) has been developed comprising a human or chimpanzee immunoglobulin (Ig) constant region and an Old world monkey antigen (Ag)-binding region. An anti-CD4 antibody (Ab) comprising the light- and heavy-chain variable regions encoded by AAT91564 and AAT915
                                                                                              Example 1; Fig
                                                                                                                                                                                                                          (IDEC-)
                                                                                                                                                                                                                                                                                                                                                                                                                               Anti-CD4 antibody; cynomolgus monkey;
chimpanzee; chimeric antibody; human t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cynomolgus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAT91566 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    half-life and a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   colitis) and food related allergies (e.g. migraine,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          thyroiditis, multiple sclerosis, myasthenia gravis, type 1 diabetes, uveitis, nephrotic syndrome, psoriasis, atopical dermatitis, contact dermatitis and further eczematous derm
                                                                                                                        antigen-binding region
                                                                                                                                      chimpanzee
                                                                                                                                                                                                 Hanna
                                                                                                                                                                                                                                                                                                                 25-JUL-1991;
                                                                                                                                                                                                                                                                                                                                         19-AUG-1997
                                                                                                                                                                                                                                                                                                                                                                    US5658570-A
                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                    antigen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16-JAN-1998
                                                                                                                                                                                                                                                                                        10-JUL-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 induce a human anti-Ab response. It also has a relatively
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ab of the invention is non-immunogenic and therefore does
                                                                                                                                                                           1997-424183/39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 CAAGGTCCAGNCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              l Similarity
12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                   binding
                                                                                                                                                                                                                            IDEC
                                                                                                                                  antibodies for human therapy - coee immunoglobulin constant region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCAGGTCCAGTCCA 4
                                                                                                                                                                                                 Newman RA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     monkey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                          PHARM CORP
                                                                                                                                                                                                                                                 92US-0912292.
91US-0735064.
92US-0856281.
95US-0379072.
                                                                                                .,
                                                                                                                                                                                                                                                                                                                 91US-0735064
                                                                                                                                                                                                                                                                                                                                                                                                                   neric antibody; human
region; tumour; PCR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    full effector
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Α;
                                                                                                46pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    heavy chain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          81.4%;
85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               G; 3 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 11.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    variable region primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    function with human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           . No. 4.6e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                   therapy; 0: polymerase
                                                                                                                                                                                                                                                                                                                                                                                                                                            immunoglobulin;
                                                                                                                                   comprising human or 
on and an Old World
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18;
                                                                                                                                                                                                                                                                                                                                                                                                                   ; Old Worl
ase chain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2;
                                                                                                                                                                                                                                                                                                                                                                                                                              World
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cells and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rhinitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VH1.
                                                                                                                                                                                                                                                                                                                                                                                                                   ld monkey;
reaction;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              long
                                                                                                                                   monkey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      and
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                                                                                                                                                                                                                                                                                                                                                                                                                   SS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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0;

is also new. The present sequence represents a primer, VH1, us amplification of cynomolgus monkey immunoglobulin heavy chain The Abs are useful for human therapy, especially of tumours. (

used in the

AAT91565

Old world

human therapy,

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RESULT 11
AAT62902/
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                                                  Matches
                                                               Best
                                                                         Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local
                                                                                                                                   Sequences are provided for heavy chain variable regions VH1-VH6 (AAT62902-07), heavy chain constant region IgM and IgG1-4 antisense strands (AAT62906-09), kappa and lambda light chain variable regions (AAT62910-11) and kappa and lambda light chain constant region antisense strands (AAT62912-13). Novel monoclonal and chimaeric antibodies (see also AAM14924) comprise heavy and light chain variable regions (AAW1492-33) from macaque anti-human CD4 monoclonal antibody E9.1 and human gamma-1 or gamma-4 (AAW14925-27) constant
                                                                                                  Sequence
                                                                                                                                                                                                                                                      Disclosure; Fig 8; 155pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-SEP-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  monkeys are sufficiently different from humans to allow Abs against human Ags, even relatively conserved Ags such as CD4 and CD54, to be raised in these monkeys, and are sufficiently similar to humans to avo host anti-Ab immune responses when the Abs are introduced into humans.
                                                                                                                                                                                                                                                                                                                     Chimeric antibody
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VH1 heavy chain
                                                                                                                                                                                                                                                                                               useful
                                                                                                                                                                                                                                                                                                           constant
                                                                                                                                                                                                                                                                                                                                               WPI; 1997-201913/18.
                                                                                                                                                                                                                                                                                                                                                                                                (IDEC-) IDEC PHARM CORP
                                                                                                                                                                                                                                                                                                                                                                                                                         06-SEP-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13-MAR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    W09709351-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  transplant rejection; HIV; therapy; CE9.1; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cynomolgus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-OCT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAT62902;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAT62902 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DD4; monoclonal antibody; chimaeric antibody; recombinant antibody;
cynomolgus monkey; autoimmune disease; rheumatoid arthritis;
leukaemia; lymphoma; graft-versus-host disease; asthma;
                                                               госат
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17
                         ı
                                                 Similarity
12; Conserv
                                                                                                                                                                                                                                                                                           for treatment of autoimmune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            l Similarity
12; Conser
CCAGGTCCAGTCCA
                       CAAGGTCCAGNCCA 14
                                                                                                     17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAAGGTCCAGNCCA
                                                                                                                                                                                                                                                                                                           domains
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCAGGTCCAGTCCA 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17 BP; 3 A;
                                                                                                                                                                                                                                                                                                                                                                       Newman RA,
                                                                                                   BP;
                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                         95US-0523894
                                                                                                                                                                                                                                                                                                                                                                                                                                                 96WO-US14324
                                                                                                   w
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                variable region
                                                                                                                                                                                                                                                                                          comprising monkey variable domains and human - affects CD4-mediated immune functions, espent of autoimmune disease, e.g. rheumatoid
                                                                                                   ?
                                                           81.4%;
85.7%;
                                                                                                   5 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       81.4%;
85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5 C; 6
                                                                                                                                                                                                                                                                                                                                                                        Reff ME;
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                                                                                                   σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ВP
                                                                                                   G;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                              Score 11.4; DB 18;
Pred. No. 4.6e+03;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 11.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No. 4.6
); Mismatches
                                                                                                   w
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3 T; 0 other;
                                                                                                  Η,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      No.
                                                                                                  0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .6e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 17;
                                               Indels
                                                                       Length
                                                                                                                                                   monoclonal
                                               0;
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                                               Gaps
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                                                                                                                           RESULT 13
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AAV31430/c
                                                                                                                                                                                              Best Loc
Matches
                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                   23-MAR-1992;
10-JUL-1992;
25-JAN-1995;
                                                                                                                                                                                                                                                      This primer is used for the PCR amplification of the heavy chain variable (VH) region of cynomolgus immunoglobulin sequence. This is used in the construction of a chimeric human-monkey anti-CD4 antibody. The antibody comprises antigen-binding sequences from an Old World monkey antibody and human constant domain sequences. The antibody specifically binds to CD4 and can be used in the treatment of rheumatoid or psoriatic arthritis.
        rheumatoid arthritis; PCR primer;
                 Anti-CD4 antibody; Old World monkey;
                                                                                     AAV23793;
                                                                                                                                                                                                                                     Sequence 17
                                                                                                                                                                                                                                                                                                                                            administration of chimeric human-monkey anti-CD4 antibody
                                                                                                                                                                                                                                                                                                                                                       Treatment of rheumatoid and psoriatic arthritis
                                                                                                                                                                                                                                                                                                                                                                            WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Anti-CD4 antibody;
monkey; rheumatoid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cynomolgus
                                               Primer
                                                                  29-JUL-1998
                                                                                                         AAV23793
                                                                                                                                                                                                                                                                                                                          Example 1; Fig 8; 47pp; English
                                                                                                                                                                                                                                                                                                                                                                                               Hanna
                                                                                                                                                                                                                                                                                                                                                                                                                 (IDEC-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-JUN-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US5756096-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Macaca cynomolgus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAV31430;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAV31430 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-JUL-1991;
                                                                                                                                                                                                        Local
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                                               for
                                                                                                                                                                                              l Similarity
12; Conser
                                                                                                                                                                          1 CAAGGTCCAGNCCA 14
                                                                                                                                                                                                                                                                                                                                                                                                                 IDEC
                                                                                                        standard; cDNA;
                                                                                                                                                        CCAGGTCCAGTCCA 4
                                                                                                                                                                                                                                                                                                                                                                                             Newman RA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 immunoglobulin
                                                                                                                                                                                                                                      BP;
                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                 PHARM CORP
                                                                  (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                   91US-0735064.
92US-0856281.
92US-0912292.
95US-0379072.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           95US-0476237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              95US-0476237
                                                                                                                                                                                                                                      ω
                constant domain; therapy;
                                                                                                                                                                                                                                      Α,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antigen-binding; treatment; chimeric; human;
arthritis; psoriatic arthritis; PCR primer;
                                                                entry)
                                             antibody coding sequence
                                                                                                                                                                                                                                      5 C;
                                                                                                                                                                                                       81.4%;
85.7%;
                                                                                                                                                                                                                                                                                                                                                                                               Raab
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                                                                                                                                                                                              0,
                                                                                                                                                                                                                                      G;
                                                                                                                                                                                                 Score 11.4; DB 19
Pred. No. 4.6e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  region amplifying
                                                                                                                                                                                                                                      w
                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                      Τ,
         SS
                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                      other;
                 variable heavy domain;
immuno-modulated disease;
                                                                                                                                                                                                                 19;
                                            fragment
                                                                                                                                                                                              2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  primer
                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VH1
                                                                                                                                                                                                                   17;
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AAV05683,
                                                                                                                                                                                                                                                                                                                                             RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This sequence is a PCR primer for DNA encoding an anti-CD4 antibody (Ab). The amplified sequence can be used in the method of the invention for treating a subject, where the treatment comprises administration of an Ab. The method comprises the treatment comprises administration of an Ab. The method comprises the administration of an antibody which has an Old World monkey (e.g. babbon or macaque) variable region which binds to an antigen (Ag) (or Ag binding portion), and a human constant domain. The method is useful for the treatment of eczema and immuno-modulated diseases and especially rheumatoid arthritis. The recombinant antibodies used are sufficiently different from native monkey antibodies to allow human antigens to raise these antibodies, but similar enough to human antibody so there is no immune response to the antibodies antibodies do not induce human anti-antibodies on repeated administration. They also have longer half-lives and do not have a lack of effector function with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic. Primate sp:
                                                                                                                                                                                                                                                                                                      5683/c
AAV05683
                                                          Synthetic.
                                                                                                               macaque; immunoglobulin; heavy chain variable region; chimpanzee; hybrid;
lymphoma; AIDS; autoimmune disease; inflammatory disease; transplant;
                                                                                                                                                  Primer; PCR; amplification; leader sequence; human; monkey; baboon
                                                                                                                                                                                         Human/monkey
                                                                                                                                                                                                                        05-MAY-1998
                                                                                                                                                                                                                                                                     AAV05683;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Improved method for antibody treatment - uses an antibody comprising an Old World monkey variable region and a human constant domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1998-296690/26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hanna
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (IDEC-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-MAR-1992;
05-DEC-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US5750105-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-JUL-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10-JUL-1992;
                     Macaca sp.
                                     Homo sapiens
                                                                                             tumour; antibody;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-MAY-1998
 Papio sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cells
                                                                                                                                                                                                                                                                                                                                                                                                    17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          l Similarity
12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IDEC
                                                                                                                                                                                                                                                                                                      standard;
                                                                                                                                                                                                                                                                                                                                                                                                  CCAGGTCCAGTCCA 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Fig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Newman RA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                       heavy chain variable region primer VH1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PHARM CORP.
                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  92US-0856281.
95US-0379072.
95US-0476349.
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91US-0735064
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                                                                                               SS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Α,
                                                                                                                                                                                                                                                                                                      DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81.4%;
85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ç;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 11.4; DB 19;
Pred. No. 4.6e+03;
D; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4; DD
. 4.6e+03;
2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                             RESULT 15
AAT43427/c
ID AAT43
                                     OS XX PN XX PD XX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.0-JUL-1992;
25-JUL-1991;
23-MAR-1992;
25-JAN-1995;
07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antigen-binding region; and (ii) a human or chimpanzee Ig constant region. The hybrid antibodies can be used as passive or active therapeutic agents against human diseases, e.g. B-cell lymphoma, AIDS, autoimmune and inflammatory diseases, transplant rejection or tumours, or for producing therapeutic and diagnostic conjugates. Although evolutionary distant monkeys are used to raise antibodies against human antigens, they are sufficiently similar that they produce antibodies similar to human antibodies, such when the monkey antibodies are introduced into humans, no host anti-antibody response is stimulated.
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 15-MAY-1995;
                                     14-MAY-1996;
                                                                          21-NOV-1996
                                                                                                                                                                                   animal model; pig; monoclonal antibody; prime
polymerase chain reaction; phage display; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of a recombinant antibody comprising: (i) an Old World monkey Ig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nucleic acid encoding hybrid antibody - comprising monkey antigen-binding region and human or chimp constant region {\bf r}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1998-031820/03.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             02-DEC-1997
                                                                                                               WO9636358-A1
                                                                                                                                                                                                         Xenograft rejection; xenotransplantation; organ
animal model; pig; monoclonal antibody; primer;
                                                                                                                                                                                                                                                               VH1 family specific primer for human heavy chain
                                                                                                                                                                                                                                                                                                  17-FEB-1997 (first entry)
                                                                                                                                                                                                                                                                                                                                                                             AAT43427 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 1;
                                                                                                                                                  Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (Macaca sp.)) i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hanna N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (IDEC-) IDEC PHARM CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sequence represents a sense primer derived by comparing sequences human and monkey (especially babboon (Papid Sp.) and macaque aca sp.)) immunoglobulin (Ig) heavy chain regions. The primer is to amplify the monkey heavy chain variable region for construction
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 CAAGGTCCAGNCCA 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCAGGTCCAGTCCA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Fig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP; 3 A; 5 C; 6 G; 3 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      92US-0856281.
95US-0379072.
95US-0481869.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8; 46pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               92US-0912292
91US-0735064
95US-0440621
                                     96WO-US06804
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81.4%;
85.7%;
                                                                                                                                                                                                                                                                                                                                                                             ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 11.4; DB 19
pred. No. 4.6e+03;
                                                                                                                                                                                                       antibody; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 19;
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Length Indels

0;

Gaps

0,

transplant;
PCR;

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В
                                                                                                                                                                                                                               Search completed: June 21, 2003, 22:26:29 Job time: 78.7812 secs
                                                                                                             δÃ
                                                                                                                                             Query Match 81.4
Best Local Similarity 85.7
Matches 12; Conservative
                                                                                                                                                                                                                                                       PCR primers VH1-VH6 (AAT43427-32) are Ig family specific heavy chain 5' primers designed for the amplification of antibody VH region cDNA and for the introduction of cohesive termini compatible with directional ligation into the unique Noti or Spel sites of the SurfZAP vector. They were used with 3' primers in the PCR amplification of antibody heavy chain variable region cDNA from lymphocytes of a human transplant patient who had received a porcine xenograft. A human IgM heavy chain, human IgM light chain Fab library was generated using phage display and panned for anti-donor xenograft antibody sequences.
                                                                                                                                                                                                                         Sequence 18 BP; 4 A; 5 C; 6 G; 3 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Inhibiting xenograft rejection by modifying antigen expression of the graft - prevents binding of anti-donor antibody and prolongs graft survival
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cramer DV, Makowka L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1997-011852/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 16; Page 121; 135pp; English.
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                                                                     1 CAAGGTCCAGNCCA 14
| ||||||||| |||
17 CCAGGTCCAGTCCA 4
                                                                                                                                               81.4%; Score 11.4; DB 18;
85.7%; Pred. No. 4.6e+03;
rative 0; Mismatches 2;
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Minimum DB
Maximum DB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Perfect score:
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       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score
       seq length: 0 seq length: 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Issued_Patents_NA:*
1: /cgn2_6/ptodata/1,
2: /cgn2_6/ptodata/1,
3: /cgn2_6/ptodata/1,
4: /cgn2_6/ptodata/1,
5: /cgn2_6/ptodata/1,
6: /cgn2_6/ptodata/1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               June 21, 2003, 21:30:22; Search time 16.625 Seconds
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1 CAAGGTCCAGNCCA 14
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       Gapop 10.0 , Gapext 1.0
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Copyright (c) 1993 - 2003 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
/cgn2_6/ptodata/1/ina/5B_COMB.seq:*
/cgn2_6/ptodata/1/ina/6B_COMB.seq:*
/cgn2_6/ptodata/1/ina/6B_COMB.seq:*
/cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
/cgn2_6/ptodata/1/ina/backfiles1.seq:*
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       DΒ
US-08-379-072A-5
US-08-478-039-51
US-08-478-039-51
US-08-476-249A-51
US-08-476-237-1
US-08-523-894-44
US-09-523-487-13
US-09-523-487-13
US-08-646-687-3
US-08-646-687-3
US-08-646-687-3
US-08-646-687-3
US-08-478-039-20
US-08-478-039-20
US-08-478-039-20
US-08-646-611-59
US-08-814-412-21
PCT-US94-111-59
US-08-814-110-52
US-09-281-246-339
US-09-184-658-24
US-09-184-658-24
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258.254 Million cell updates/sec
  sequence
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Sequence
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  5, Appli
51, Appl
11, Appl
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12, Appl
13, Appl
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13, Appl
13, Appl
14, Appl
15, Appl
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17, Appl
18, Appl
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|  | 45                | 44                 | 3                | 42                | 41                | 40                | 39                | 38                 | 37                 | 36                | 35                | 34                | 33                | 32                | 31                | 30                | 29                | 28                |
|  | 10                | 10                 | 10               | 10                | 10                | 10                | 10.4.             | 10.4               | 10.4               | 10.4              | 10.4              | 10.4              | 10.4              | 10.4              | 10.4              | 10.4              | 10.4              | 10.4              |
|  | 71.4              | 71.4               | 71.4             | 71.4              | 71.4              | 71.4              | 74.3              | 74.3               | 74.3               | 74.3              | 74.3              | 74.3              | 74.3              | 74.3              | 74.3              | 74.3              | 74.3              | 74.3              |
|  | 22                | 22                 | 20               | 20                | 20                | 20                | 43                | 39                 | 39                 | 30                | 28                | 26                | 26                | 25                | 24                | 22                | 21                | 21                |
|  | ب                 | ب                  | 4                | w                 | ⊢                 | ٢                 | w                 | σ                  | φ                  | Ν                 | G                 | 4                 | 2                 | 4                 | N                 | 4                 | 4                 | 4                 |
|  | US-08-379-078-314 | US-08-379-081B-314 | US-09-746-694-40 | US-09-289-267-65  | US-07-841-652-8   | US-07-767-135-17  | US-08-589-939-61  | 5427925-17         | 5187077-19         | US-08-924-440-4   | PCT-US94-10957-19 | US-09-225-928-653 | US-08-859-998-653 | US-09-462-136-10  | US-08-691-814B-53 | US-09-487-792-50  | US-09-819-964-16  | US-08-949-155-16  |
|  | Sequence 314, App | Sequence 314, App  | 40,              | Sequence 65, Appl | Sequence 8, Appli | Sequence 17, Appl | Sequence 61, Appl | Patent No. 5427925 | Patent No. 5187077 | Sequence 4, Appli | Sequence 19, Appl | Sequence 653, App | Sequence 653, App | Sequence 10, Appl | Sequence 53, Appl | Sequence 50, Appl | Sequence 16, Appl | Sequence 16, Appl |

## ALIGNMENTS

US-08-379-072A-5/c

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US-08-379-072A-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 5, Application US/08379072A Patent No. 5658570
                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Release #1.0, VGURRENT APPLICATION DATA:
APPLICATION UMMBER: US/08/379,072A
FILING DATE: 25-JAN-1995
CLASSIFICATION 424
PRIOR APPLICATION UMBER: US 07/912,292
APPLICATION NUMBER: US 07/912,292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET: P.O. Box 1404
CITY: Alexandria
STATE: Virginia
COUNTRY: United States
ZIP: 22313-1404
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                            INFORMATION FOR SEQ ID NO:
               STRANDEDNESS: single TOPOLOGY: linear MOLECULE TYPE: DNA (gen
                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 17 base pairs
TYPE: nucleic acid
                                                                                                                                                           TELECOMMUNICATION INFORMATION: TELEPHONE: (703) 836-6620
TELEFAX: (703) 836-2021
                                                                                                                                                                                                                      APPLICATION NUMBER: US 07/735,064
FILLING DATE: 25-JUL-1991
ATTORNEY/AGENT INFORMATION:
NAME: Rea, Teresa Stanek
REGISTRATION NUMBER: 30,427
REFERENCE/DOCKET NUMBER: 012712-0
                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0:
FILING DATE: 23-MAR-1992
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: RECOMBINANT ANTIBODIES FOR HUMAN THERAPY NUMBER OF SEQUENCES: 20
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NEWMAN, ROland A
HANNA, Nabil
RAAB, Ronald W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Floppy disk
                 .DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                   10-JUL-1992
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Patent No.
                               Matches
                                           Query Match
Best Local
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Best Local Similarity
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                                                                                                                                                                                                                                          NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 17 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                   POSITION IN GENOME:
                                                                                                                                                  TOPOLOGY: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: RENUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                    ANTI-SENSE:
                                                                                                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                      FILING DATE: 25-JUL-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
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APPLICATION NUMBER: US 07/912,292
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                                                                                                                                                              TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: 699 Prince CITY: Alexandria
                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: 01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 08 FILING DATE: 25-JAN-1995
                                                                                                                                                                                                                                                                     TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 07/735,064 FILING DATE: 25-JUL-1991
                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
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1 CAAGGTCCAGNCCA 14
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                                             Similarity
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Raab, Ronald W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      699 Prince St
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                             Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                         23-MAR-1992
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                                         81.4%;
85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Recombinant Antibodies for Human Therapy
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85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                    US 07/856,281
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                                                                                                     heavy chain variable region
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                                                                                                                                                                                                                                                                                                  012712-160
                          Score 11.4; D
Pred. No. 5.8e
O; Mismatches
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                                           .8e+02
                                                           DB 1;
                                                       Length 17;
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                           Indels
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RESULT 4
US-08-476-349A-51/c
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                                                Sequence 51, Application US/08476349A Patent No. 5750105
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                                                                                                                                                                                                              Matches
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GENERAL INFORMATION:
                                                                                                                                                                                                                             Query Match
Best Local S
                GENERAL INFORMATION:
APPLICANT: Newman
                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: (703) 836-20: INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 17 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
FILING DATE: 23-MAR-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION: 536 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION: NAME: Rea, Teresa Stanek
    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
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ZIP: 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: FILING DATE: 10-JU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/0 FILING DATE: 25-JAN-1995
                                                                                                                                                                                                                                                                                                                        STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Alexandria
STATE: Virginia
                                                                                                                                                                                                                                                                                                           TOPOLOGY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
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                                                                                                                                                17 CCAGGTCCAGTCCA
                                                                                                                                                                  1 CAAGGTCCAGNCCA 14
                                                                                                                                                                                                               12;
                                                                                                                                                                                                                              Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rea, Teresa Stanek
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Virginia
: United States
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RAAB, Ronald W.
                Newman, Roland A
                                                                                                                                                                                                               Conservative
Hanna, Nabil
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                                                                                                                                                                                                                                                                                          DNA (genomic)
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Pred. No. 5.8e+02
                                                                                                                                                                                                              Mismatches
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APPLICANT:

Raab, Ronald W.

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                                                                                                                                                                       Patent No.
                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                        GENERAL INFORMATION:
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SEQUENCE CHARACTERISTICS:
LENGTH: 17 base pairs
                                          NUMBER OF SEQUENCES: 16
CORRESPONDENCE ADDRESS:
ADDRESSEE: Browner
                                                                                                                                                                                                                                                                                                                                                                                                           POSITION IN GENOME:
CHROMOSOME/SEGMENT:
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MEDIUM TYPE: Floppy disk
                                                                                      APPLICANT: HANNA, NAPPLICANT: RAAB, RCTITLE OF INVENTION:
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REFERENCE/DOCKET NUMBER: 01
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703.836-6620
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/912,292
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APPLICATION NUMBER: US 08/379,072
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APPLICATION NUMBER:
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APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: nucleic acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                             STREET:
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                                                                                                                                                                                                                                                                                                1 CAAGGTCCAGNCCA 14
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                                                                                                                                                                                                                                                                                                                                              Similarity
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             SSEE: Burns, Doane, Swecker & Mathis
P: 'P.O. Box 1404
Alexandria
                                                                                                                                                                                                                                                                   CCAGGTCCAGTCCA 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Teskin Esq., Robin L.
                                                                                                                                                                                      Application US/08476237
                                                                                                     NEWMAN, Roland A
HANNA, Nabil
RAAB, Ronald W
Virginia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
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SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                        Roland A.
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                                                                                                                                                                                                                                                                                                                                            81.4%;
85.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                            heavy chain variable region
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Pred. No. 5
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: (703) 836-20: INFORMATION FOR SEQ ID NO:
                               APPLICATION NUMBER: US/01
FILING DATE: 06-SEP-1995
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Teskin, Robin L.
                                                                                                                                                                       ZIP: 22314-3187
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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MEDIUM TYPE: Floppy disk
                                                                                                               SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
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TELECOMMUNICATION INFORMATION:
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ATTORNEY/AGENT INFORMATION:
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CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
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ZIP: 223
                                                                                                                         COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0
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NAME: Teskin, Robin L.
REGISTRATION NUMBER: 35,030
REFERENCE/DOCKET NUMBER: 01:
                                                                                                                                                                                                                                           STATE:
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                                                                                                                                                                                                                            COUNTRY:
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12; Conser
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6136310
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                                                                                                                                                                                                                                                                           699 Prince Street
                                                                                                                                                                                                                            USA
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                                                                                                                                                                                                                                                                                                                                                                    Newman, Roland A. Reff, Mitchell E.
                                                                                                                                                                                                                                                                                                                                                                                                     Hanna, Nabil
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                                                                                                                                                                                                                                                                                         BURNS,
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                                                                                                                                                                                                                                                                                        DOANE, SWECKER & MATHIS
                                                                                                                                                                                                                                                                                                                                                       Recombinant Anti-CD4 Antibodies
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Pred. No. 5.8e+02;
                                                                                                                               Version #1.30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 20
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 13
LENGTH: 22
                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                Sequence 13, Application US/09523487 Patent No. 6232098
                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                               Query Match
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Best Local :
                              CURRENT APPLICATION NUMBER: US/09/523,487
CURRENT FILING DATE: 2000-03-10
                                                                                                                         APPLICANT: Conklin, Darrell (APPLICANT: Foster, Donald C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/320,095
                                                                 FILE REFERENCE:
                                                                             TITLE OF INVENTION: KUNITZ DOMAIN POLYPEPTIDE AND MATERIALS TITLE OF INVENTION: AND METHODS FOR MAKING IT
                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EARLIER APPLICATION NUMBER: US 60/087,032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILE REFERENCE: 98-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: KUNITZ DOMAIN POLYPEPTIDE AND MATERIALS TITLE OF INVENTION: AND METHODS FOR MAKING IT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ÁPPLICANT: Conklin, Darrell C.
ÁPPLICANT: Foster, Donald C.
ÁPPLICANT: Gao, Zeren
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 17 base pairs
TYPE: nucleic acid
FILING DATE:
               APPLICATION NUMBER:
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BER: 09/320,095
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Pred. No. 5
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Pred. No. 5
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SOFTWARE: Fai
SEQ ID NO 13
FRNGTH: 22
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Best Local S
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APPLICANT: Newman
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                                                                                                                         TELEFAX: 703-836-2021 INFORMATION FOR SEQ ID NO:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
                                                                                                                                                                     NAME: Teskin Esq., Robin L.
REGISTRATION NUMBER: 35,030
REFERENCE/DOCKET NUMBER: 01.
TELECOMMUNICATION INFORMATION:
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APPLICATION NUMBER:
FILING DATE: 23-MAR-
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APPLICATION NUMBER: US 08/379,072
FILTING DATE: 25-JAN-1995
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                        SEQUENCE CHARACTERISTICS:
LENGTH: 26 base pairs
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ATTORNEY/AGENT INFORMATION:
NAME: Teskin Esq., Robin
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ANTI-SENSE:
ORIGINAL SO
                               MOLECULE TYPE:
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                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 0 FILING DATE: 10-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/0 FILING DATE: 07-JUN-1995
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SOFTWARE: PatentIn Release #1.0,
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                                                          STRANDEDNESS:
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12; Conserv
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SOURCE
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Pred. No. 5
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CHROMOSOME/SEGMENT: US-08-476-349A-20
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INFORMATION FOR SEQ ID NO:
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SOFTWARE: Patentin Rel
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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                               POSITION IN GENOME
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NUMBER OF SEQUENCES: 114
CORRESPONDENCE ADDRESS:
ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS
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                                                             ORIGINAL SOURCE:
                                                                                                                                                                        SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                   FILING DATE: 25-JUL-1991
ATTORNEY/AGENT INFORMATION:
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APPLICATION NUMBER:
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                                                                            ANTI-SENSE:
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                                             ORGANISM:
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                                                                                                                         STRANDEDNESS:
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                                                                                                            POPOLOGY:
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                                                                                                                                                      26 base pairs
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Raab, Ronald W
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                                             Homo sapiens or Monkey
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23-MAR-1992
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             heavy chain primers with SalI site
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RESULT 12
US-08-646-367-3/c
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Sequence 3, Application US/08646367
Patent No. 5959085
GENERAL INFORMATION:
APPLICANT: Pierre Garrone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 13, Appli
Patent No. 6136310
                                                                                                                                                                                    Query Match
Best Local Similarity
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Best Local (
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                                                                                                                                                                                                                                          POSITION IN GENOME: CHROMOSOME/SEGMENT: VH1 leader sequence
                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS
LENGTH: 26 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION: TELEPHONE: 703-836-6620
TELEFAX: 703-836-2021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Release #1.0, Vérsion #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                      ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                 STRANDEDNESS:
TOPOLOGY: lir
MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION: NAME: Teskin, Robin L.
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                                                                                                                                                                                                                                                                                                  ANTI-SENSE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Teskin, Robin L.
REGISTRATION NUMBER: 35
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: FILING DATE: 06-SE CLASSIFICATION: 42
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                                                                                                                26 CCAGGTCCAGTCCA 13
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                                                                                                                                                                     Conservative
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SYSTEM: PC-DOS/MS-DOS
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85.7%;
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Pred. No. 6
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APPLICANT:

Pierre Garrone Odile Djossou

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RESULT 13
US-08-373-190-59/c
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                                                                                                                                                                                                                                                                                                                                                                                                     Patent No.
                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: MARASCO, WAYNE
APPLICANT: HASELTINE, WILLIAM
TITLE OF INVENTION: METHOD OF INTRACELLULAR BINDING OF PROTEINS
NUMBER OF SEQUENCES: 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: 908-298-5388
                                                                               COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 1.5
CURRENT APPLICATION DATA:
                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 27 base pairs
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OPERATING SYSTEM: Macintosh 7.5.3
SOFTWARE: Microsoft Word 5.1a
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 2000
STREET: Kenilworth
CITY: Kenilworth
STATE: New Jersey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Jacques Banchereau TITLE OF INVENTION: Human Mond TITLE OF INVENTION: Against H. TITLE OF INVENTION: Methods Of
                 CLASSIFICATION: 435
PRIOR APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
                                                    APPLICATION NUMBER: US/08/373,190 FILING DATE: 17-JAN-1995
   APPLICATION NUMBER:
                                                                                                                                                                                            COUNTRY: US
ZIP: 02109
                                                                                                                                                                                                                                STATE:
                                                                                                                                                                                                                                              STREET: 130 CITY: BOSTON
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REGISTRATION NUMBER: 32,364
REFERENCE/DOCKET NUMBER: SF0403K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: FILING DATE: May 16
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12; Conserv
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DEDNESS: single
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ON: 530
                                                                                                                                                            Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81.48;
85.78;
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Against Human Cytokines And
Methods Of Making And Using Such Antibodies
PCT/US93/06735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 11.4;
Pred. No. 6
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US-08-438-190A-59
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                                                                          TELEFAX: (617) 523-644
TELEX: 200291 STRE UR
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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TELEX: STRE UR 2002
INFORMATION FOR SEQ ID NO:
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                                                                                                                                                                                                       CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: EISENSTEIN, RONALD I.
                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Rel
                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: DAVID G. CONLIN; DIKE, BRONSTEIN, ROBERTS
ADDRESSEE: CUSHMAN
                                                                                                                                           TELECOMMUNICATION INFORMATION: TELEPHONE: (617) 523-3400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION: TELEPHONE: 617-523-3400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: MARASCO, WAYNE APPLICANT: HASELTINE, WILL
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LENGTH: 30 base pairs
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                       OPERATING SYSTEM: PC-DOS/MS-U-S
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                          TELEPHONE:
                                                                                                                                                                         NAME: EISENSTEIN, RONALD REGISTRATION NUMBER: 306 REFERENCE/DOCKET NUMBER:
                            STRANDEDNESS:
                                              TYPE:
                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/08/438,190A FILING DATE:
                                                                                                                                                                                                                                                                                                                                         COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: US
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                                                               LENGTH:
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                        H: 30 base pairs nucleic acid DEDNESS: single
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                                                                                                                           (617) 523-6440
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SYSTEM: PC-DOS/MS-DOS
              linear
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US-08-803-085-14/c
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Search completed: June 22, 2003, 00:01:38 Job time : 18.625 secs
                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/803,085
FILING DATE: 20-FEB-1997
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Teskin, Robin L.
NAME: Teskin, Robin L.
REGISTRATION NUMBER: 35,030
REFERENCE/DOCKET NUMBER: 012712-353
TELECOMMUNICATION INFORMATION:
TELEFAX: (703) 836-6620
TELEFAX: (703) 836-2021
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 30 base pairs
TYPE: Nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                       ; MOLECULE TYPE: US-08-803-085-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 14, Patent No. 6
                                                                                                                                     Matches
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Best Local Similarity
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: REFF, Mitchell E.
APPLICANT: KLOETZER, William S.
APPLICANT: NAKAMURA, Takehiko
TITLE OF INVENTION: GAMMA-1 ANTI-HUMAN CD23 MONOCLONÀL
TITLE OF INVENTION: ANTIBODIES AND USE THEREOF AS THERAPEUTICS
NUMBER OF SEQUENCES: 35
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
BURNS, DOANE, SWECKER & MATHIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STATE: Virginia COUNTRY: United States ZIP: 22313-1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: P.O. Box 1404
CITY: Alexandria
                                                                30 CCAGGTCCAGTCCA 17
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                                                                                  1 CAAGGTCCAGNCCA 14.
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60|1138
                                                                                                                                     Conservative
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                                                                                                                                                    81.4%;
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85.7%;
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Pred. No. 6.1e+02;
0; Mismatches 2;
                                                                                                                                                     Score 11.4;
Pred. No. 6
                                                                                                                                     Mismatches
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. 6.1e+02;
. 5.2e+02;
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Maximum DB
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Maximum Match 100%
Listing first 45 s
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| length: 50
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                                                                                                                                                                                                                                                                                                                                   is the number of results predicted by chance to have a ater than or equal to the score of the result being printed,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     June 21, 2003, 22:26:37; Search time 41.3438 Seconds (without alignments) 496.907 Million cell updates/sec
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    US-09-964-666-14
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/cgn2_6/ptodata/2/pubpna/US08_BUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US09_EUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US09_FUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US10_NEW_PUB.seq:*
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/cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/PCTUS_PUBCOMB.seq:*
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/cgn2_6/ptodata/2/pubpna/US60_PUBCOMB.seq:*
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0 US-09-964-412-14
US-09-940-185-281
US-09-940-185-4261
US-10-211-357-44
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Sequence 14, Appl
Sequence 14, Appl
Sequence 281, App
Sequence 4261, App
Sequence 44, Appl
Sequence 1, Appl
Sequence 16, Appl
Sequence 16, Appl
Sequence 16, Appl
Sequence 2, Appli
Sequence 2, Appli
Sequence 3, Appl
Sequence 13, Appl
Sequence 13, Appl
Sequence 13, Appl
Sequence 13, Appl
Sequence 14, Appl
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|------------|-----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|---------------------|------------------|--------------------|------------------|-------------------|---------------------|--------------------|----------------------|-------------------|--------------------|----------|------|-------|------------------|-------------------|
|            | 45                    | 44                   | 43                   | 42                   | 41                   | 40                   | 39                   | 38                   | 37                   | 36                   | 35                   | 34                  | 33               | 32                 | 31               | 30                | 29                  | 28                 | 27                   | 26                | 25                 | 24       | 23   | 22    | 21               | 20                |
|            | 10.4                  | 10.4                 | 10.4                 | 10.4                 | 10.4                 | 10.4                 | 10.4                 | 10.4                 | 10.4                 | 10.4                 | 10.4                 | 10.4                | 10.4             | 10.4               | 10.4             | 10.4              | 10.4                | 10.6               | 11                   | 11.4              | 11.4               | 11.4     | 11.4 | 11.4  | 11.4             | 11.4              |
|            | 74.3                  |                      |                      | •                    | •                    |                      | 74.3                 | •                    |                      |                      |                      |                     |                  | •                  | •                |                   |                     | •                  |                      | 81.4              | 81.4               | 81.4     | 81.4 | 81.4  | 81.4             | 81.4              |
|            | 25                    | 25                   | 25                   | 25                   | 25                   | 25                   | 25                   | 25                   | 25                   | 25                   | 25                   | 25                  | 25               | 25                 | 20               | 20                | 17                  | 31                 | 25                   | 39                | 38                 | 38       | 38   | 38    | 38               | 37                |
|            | 9                     | 9                    | 9                    | 9                    | 9                    | 9                    | 9                    | 9                    | 9                    | 9                    | 9                    | 9                   | 9                | 9                  | 9                | 9                 | 9                   | 10                 | 9                    | 9                 | 9                  | 9        | 9    | 9     | 9                | 9                 |
| ALIGNMENTS | US-10-098-263B-102710 | US-10-098-263B-89716 | US-10-098-263B-81538 | US-10-098-263B-62978 | US-10-098-263B-62519 | US-10-098-263B-59924 | US-10-098-263B-57464 | US-10-098-263B-51690 | US-10-098-263B-35907 | US-10-098-263B-35398 | US-10-098-263B-35397 | US-09-864-636A-2607 | US-10-208-731-10 | US-10-215-112-6573 | US-09-906-032A-3 | US-10-087-325-19  | US-09-864-636A-2609 | US-09-801-274-1163 | US-10-098-263B-45863 | US-09-971-980-21  | US-09-930-423-2985 | -825-805 | -805 | 5-805 | US-09-925-664-52 | 5-805             |
|            | Sequence 102710,      | Sequence 89716, A    |                      | •                    |                      |                      |                      | 51690,               | Sequence 35907; A    | Sequence 35398, A    |                      | 2607                |                  | Ġ                  |                  | Sequence 19, Appl | 2609, A             | Sequence 1163, Ap  | CD.                  | Sequence 21, Appl | Sequence 2985, Ap  | 1106,    | 987, | 54,   | 52, 1            | Sequence 219, App |

US-09-964-667-14 RESULT 1

Sequence 14, Application US/09964667 Publication No. US20030033621A1 GENERAL INFORMATION:

APPLICANT: de la Monte, Suzanne Wands, Jack R.

TITLE OF INVENTION: Transgenic Animals and Cell Lines Screening Drugs Effective for the of Alzheimer's Disease

s for e Treatment '

or Preventio

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INFORMATION FOR SEQ ID NO: 14:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: 0609.4370000
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
TELEFAX: 202-371-2540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 20005-3934

COMPUTER READABLE FORN:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION NUMBER: US/09/964,667

FILING DATE: 28-Sep-2001

CINCETITION OF THE PROPERTY OF THE PROPERTY PR
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CORRESPONDENCE ADDRESS:
ADDRESSE: Sterne, Kessler, Goldstein
STREET: 1100 New York Ave., Suite 600
CITY: Washington
STATE: DC
TOPOLOGY: linear
MOLECULE TYPE: cDNA
SEQUENCE DESCRIPTION: SEQ ID NO: 14:
                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
LENGTH: 14 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                              TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Esmond, Robert W. REGISTRATION NUMBER: 32,893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: <Unknown>
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US-10-103-686-14 US-09-019-441-14 US-09-850-165-42 C

0 US-09-850-165-1 US-10-067-790-16 US-10-067-892-16 US-10-067-892-16 US-10-067-893-16 US-10-067-893-16 US-10-024-018-2 US-10-225-1218-38 US-10-215-112-10872 US-10-215-157-13

of Alzheimer's Disease

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US-09-964-412-14
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                                                                        Sequence 14, Application US/09964412 Patent No. US20020129391A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 14, Application US/09964666 Patent No. US20020104108A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                     Best Local Similarity
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO: 14:
TITLE OF INVENTION: Transgenic Animals and Cell Lines for Screening Drugs Effective for the Treatment or Prevention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
TELEFAX: 202-371-2540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler,
STREET: 1100 New York Ave.,
                                         APPLICANT: de la Monte, Suzanne
Wands, Jack R.
                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear MOLECULE TYPE: cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                      SEQUENCE DESCRIPTION: SEQ ID NO: 14:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: de la Monte, Si
Wands, Jack R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                   14;
                                                                                                                                                                                                                                 1 CAAGGTCCAGNCCA 14
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                                                                                                                                                                                              CAAGGTCCAGNCCA 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Esmond, Robert W.
REGISTRATION NUMBER: 32,893
REFERENCE/DOCKET NUMBER: 06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/09/964,666 FILING DATE: 28-Sep-2001 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: USA
ZIP: 20005-3934
                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 14 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STATE: DC
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Screening Drugs Effective for the Treatment or Prevention
of Alzheimer's Disease
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                                                                                                                                                                                                                                                                                   Score 13; pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Kessler, Goldstein & Fox, P.L.L.C. ork Ave., Suite 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
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Pred. No.
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5.3e+02;
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5.3e+02;
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Query Match
Best Local Similarity
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                                                                                        ; OTHER INFORMATION: Computer Generated Probe Sequence US-09-940-185-281
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US-09-940-185-281/c
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                                                                                                                                                             NUMBER OF SEQ ID NOS: 4768
SOFTWARE: Patentin version 3.1
SEQ ID NO 281
LENGTH: 24
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 281, Application US/09940185
Publication No. US20030096239A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Probes and Decoder Oligonucleotides FILE REFERENCE: A 69605-1 CURRENT APPLICATION NUMBER: US/09/940,185 CURRENT FILING DATE: 2001-08-27
                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US 60/228,854 PRIOR FILING DATE: 2000-08-29
                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: US 60/227,948 PRIOR FILING DATE: 2000-08-25
                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Gunderson, Kevin
                                                                                                                             FEATURE:
                                                                                                                                            ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: 202-371-2540 INFORMATION FOR SEQ ID NO: 14:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTE Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear
MOLECULE TYPE: cDNA
SEQUENCE DESCRIPTION: SEQ ID NO: 14:
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ADDRESSEE: Sterne, Kessler,
STREET: 1100 New York Ave.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/09/964,412 FILING DATE: 28-Sep-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 14 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE: 202-371-2600
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                                                                                                                                                                                                                                                                                                                                                                                                              Chee, Mark
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                   Conservative
                                  85.7%;
92.3%;
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Pred. No.
                                  Score 12; DB 9;
Pred. No. 1.8e+03;
                   Mismatches
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. 5.3e+02;
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                                                    Length 24;
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                 Indels
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CAAGGTCCAGACC

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US-10-211-357-44/c
US-10-211-357-44/c
; Sequence 44, Application US/10211357; Publication No. US20030077275A1; GENERAL INFORMATION:
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LENGTH: 25
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/940,185
CURRENT FILING DATE: 2001-08-27
PRIOR APPLICATION NUMBER: US 60/227,948
PRIOR FILING DATE: 2000-08-25
PRIOR APPLICATION NUMBER: US 60/228,854
PRIOR FILING DATE: 2000-08-29
PRIOR FILING DATE: 2000-08-29
NUMBER OF SEQ ID NOS: 4768
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APPLICANT: Chee, Mark
TITLE OF INVENTION: Probes and Decoder Oligonucleotides
FILE REFERENCE: A-69605-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Artificial Sequence
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                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                        SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
BURNS, DOANE, SWECKER & MATHIS
                                                                                                         PRIOR APPLICATION DATA:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION:
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                                     APPLICATION NUMBER: US/09/612,914A FILING DATE: 10-Jul-2000 APPLICATION NUMBER: US 08/523,894
                                                                                                                           CLASSIFICATION: <Unknown>
                                                                                                                                            APPLICATION NUMBER: US/10/211,357 FILING DATE: 05-Aug-2002
                                                                                                                                                                                                                                                                                                                                                                                 CITY: Alexandria
                     FILING DATE: 06-SEP-1995
                                                                                                                                                                                                                                                                                                                                         COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                               STATE: VA
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                                                                                                                                                                                                                                                                                                                                                                                                     699 Prince Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    85.7%;
92.3%;
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Mitchell E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Recombinant Anti-CD4 Antibodies for Human
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Pred. No. 1.8e+03;
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                                                                                                                                                  ; OTHER INFORMATION: Description of Artificial Sequence: Primer us\hbox{-}09\hbox{-}850\hbox{-}165\hbox{-}1
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                                                                           Query Match
Best Local S
Matches 12
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SEQ ID NO 1
LENGTH: 17
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SEQUENCE CHARACTERISTICS:
LENGTH: 17 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: HANNA, NABIL
APPLICANT: RAAB, RONALD W.
TITLE OF INVENTION: RECOMBINANT ANTIBODIES FOR HUMAN THERAPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/850,165
CURRENT FILING DATE: 2001-05-08
PRIOR APPLICATION NUMBER: 09/082,472
PRIOR FILING DATE: 1998-05-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: NEWMAN, ROLAND A.
                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 1992-03-23 PRIOR APPLICATION NUMBER: 07/
                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 1995-04-17
PRIOR APPLICATION NUMBER: 07/912,292
PRIOR FILING DATE: 1992-07-10
PRIOR APPLICATION NUMBER: 07/856,281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 08/476,237 PRIOR FILING DATE: 1995-06-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILE REFERENCE: 037003-0280614
                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 1991-07-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 08/397,072
                                                                                                                                                                                                                               TYPE: DNA
                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                         ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                           Local Similarity es 12; Conserv
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CCAGGTCCAGTCCA 4
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TELEFAX: 703-836-2021
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REFERENCE/DOCKET NUMBER: 012712-165
                                                                           Conservative
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85.7%;
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85.7%;
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                                                                                            Score 11.4;
Pred. No. 46
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Pred. No. 46
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                                                                                                            Length 17;
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RESULT 8
US-10-067-790-16/c
; Sequence 16, Application US/10067790

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                                                                                                                                              ; NAME/KEY: misc_feature
LOCATION: ()..()
; OTHER INFORMATION: primer
US-10-067-892-16
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; LOCATION: ()..()
; OTHER INFORMATION: primer
US-10-067-790-16
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Best Local Similarity
Matches 12; Conserv
                                                                                        Query Match
Best Local 9
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SOFTWARE: PatentIn version 3.0
SEQ ID NO 16
                                                                         Matches
                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn version 3.0 SEQ ID NO 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/10/067,790 CURRENT FILING DATE: 2002-02-08 PRIOR APPLICATION NUMBER: US/09/522,900 PRIOR FILING DATE: 2000-03-10 PRIOR APPLICATION NUMBER: US 60/155,579 PRIOR APPLICATION NUMBER: US 60/155,579 PRIOR FILING DATE: 1999-09-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: LINDBO, John
APPLICANT: TURPEN, Thomas
TITLE OF INVENTION: SELF ANTIGEN VACCINES FOR TREATING B CELL LYMPHOMAS AND OTHER CALFILE REFERENCE: 18696-169194
                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: McCORMICK, Alison
APPLICANT: TUSE, Daniel
APPLICANT: REINL, Stephen
                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: US/09/522,900 PRIOR FILING DATE: 2000-03-10
                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: MCCORMICK, Alison APPLICANT: TUSE, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10-067-892-16/c
                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: SELF ANTIGEN VACCINES FOR TREATING B CELL LYMPHOMAS ITTLE OF INVENTION: AND OTHER CANCERS
TILE REFERENCE: 18696-169194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ublication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Unknown
                                                                                                                                                                                                                                    ORGANISM: Unknown
                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                           TYPE: DNA
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                                                                                                                                                                                                                                                                               LENGTH: 18
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15 CCAGGTCCAGTCCA 2
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                     1 CAAGGTCCAGNCCA 14
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                                                                                        Similarity
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REINL, Stephen
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                                                                       Conservative
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85.7%;
                                                                                        81.4%;
85.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 11.4; DB Pred. No. 4e+03;
                                                                                      Score 11.4;
Pred. No. 4
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                                                                     Mismatches
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                                                                                                       DB 9; Length 18;
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; LOCATION: ()...()
; OTHER INFORMATION: primer
US-09-539-382-16
                                                                                                   ; OTHER INFORMATION: primer US-10-067-893-16
                                                                                                                                                                                SEQ ID NO 16

LENGTH: 18

TYPE: DNA
ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-067-893-16/c
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LENGTH: 18
TYPE: DNA
ORGANISM: Unknown
FEATURE:
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                                                  Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                  Matches
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APPLICANT:
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Best Local 9
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APPLICANT: TUSE, Daniel
APPLICANT: REINL, Stephen
                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: US 60/155,579 PRIOR FILING DATE: 1999-09-24
                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/10/067,893
CURRENT FILING DATE: 2002-02-08
PRIOR APPLICATION NUMBER: 09/522,900
PRIOR FILING DATE: 2000-03-10
                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: TURPEN, Thomas
TITLE OF INVENTION: SELF ANTIGEN VACCINES FOR TREATING B CELL LYMPHOMAS AND OTHER
FILE REFERENCE: 18696-169194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 1999-
NUMBER OF SEQ ID NOS: 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/539,382 CURRENT FILING DATE: 2000-03-10 PRIOR APPLICATION NUMBER: US 60/155,579 PRIOR FILING DATE: 1999-09-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: LINDBO, JOHN
APPLICANT: TURPEN, THOMAS
TITLE OF INVENTION: SELF ANTIGEN VACCINES FOR TREATING B CELL LYMPHOMAS AND
FILE REFERENCE: 18696-169195
                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: McCORMICK, Alison
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: PatentIn version 3.0
                                                                                                                                                                                                                                                            SOFTWARE: PatentIn version 3.0
                                                                                                                                   NAME/KEY: misc_feature LOCATION: ()..()
                                                                                                                                                                         FEATURE:
                                12;
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1 CAAGGTCCAGNCCA 14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Application US/10067893
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No. US20030044417A1
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                                  Conservative
                                                  81.48;
85.78;
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85.7%;
                                  0;
                                                  Pred. No.
                                                                Score 11.4;
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Pred. No. 4
                                Mismatches
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RESULT 14
US-10-215-112-10872
Sequence 10872, Application US/10215112
Publication No. US20030082596A1
GENERAL INFORMATION:
APPLICANT: Michael Mittmann
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                                                                                                                                                                                                                                                                                                             ; OTHER INFORMATION: Description of Artificial Sequence: Primer US-09-927-121B-38
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US-10-024-018-2
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APPLICANT: University of South Florida
TITLE OF INVENTION: METHODS FOR MODULATING CELL-ADHESION MEDIATED DRUG
FILE REFERENCE: 215101.01403
                                                                                                                                                                                                                                                      Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 38
LENGTH: 22
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APPLICANT: GOLD, DANIEL P.
APPLICANT: SHOPES, ROBERI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn version 3.1 SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 2, Application US/10024018 Publication No. US20030004140A1
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Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: SHOPES, ROBERT J.

TITLE OF INVENTION: METHOD AND COMPOSITION FOR ALTERING A B CELL MEDIATED TITLE OF INVENTION: PATHOLOGY PATHOLOGY FILE REFERENCE: 032077,0003

CURRENT APPLICATION NUMBER: US/09/927,121B

CURRENT FILING DATE: 2001-08-10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT FILING DATE: 2001-08-10 NUMBER OF SEQ ID NOS: 93
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PRIOR FILING DATE: 2001-03-01
PRIOR APPLICATION NUMBER: US 60/186,199
PRIOR FILING DATE: 2000-03-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/10/024,018
CURRENT FILING DATE: 2001-12-21
                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 4
TITLE OF INVENTION: Method of Genetic Analysis of Probes:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH:
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12; Conserv
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85.7%;
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Pred. No. 3.9e
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Pred. No. 3
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3.9e+03;
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RESULT 15
US-10-211-357-13/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 10872
LENGTH: 25
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CURRENT FILING DATE: 2002-08-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 14936
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                  TELEPHONE: 703-836-66
TELEFAX: 703-836-2021
INFORMATION FOR SEQ ID NO: 13:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
                                                                                                                                                                                                                                                                                                                        FILING DATE: 10-Jul-2000
APPLICATION NUMBER: US 08/523,894
FILING DATE: 06-SEP-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compati
                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 26 base pairs
                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION: TELEPHONE: 703-836-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSEE: BURNS, DOANE,
                                                  MOLECULE TYPE:
ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
POSITION IN GENOME:
                                  ORIGINAL SOURCE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: Recombinant Anti-CD4 Antibodies for Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Hanna, Nabil
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                                                                                                          TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                    NAME: Teskin, Robin L. REGISTRATION NUMBER: 35,030
                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: <Unknown>
              ORGANISM: Human or Monkey
                                                                                          TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/09/612,914A
                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 05-Aug-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/10/211,357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STATE: VA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: 699 Prince Street
                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: 012712-165
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Mitchell E.
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85.7%;
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Pred. No. 3.8e+03;
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Database :
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Maximum Match 100%

Listing first 45 summaries
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Maximum DB seq length: 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Title:
Perfect score:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16154066 seqs, 8097743376 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        June 21, 2003, 21:28:37; Search time 604.734 Seconds (without alignments) 374.936 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gapop 10.0 , Gapext 1.0
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                                                                                                                                                                                              gb_est1: *
gb_est2: *
gb_htc: *
gb_est3: *
gb_est4: *
gb_est5: *
em_gss_other:*
em_gss_pro:*
em_gss_rod:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

### SUMMARIES

| C                                       | C                  | ဂ                  |                    |                   | ი                  | Result<br>No. |   |
|---|--------------------|--------------------|--------------------|-------------------|--------------------|---------------|---|
| 6                                       | ر.                 | 4                  | ω                  | N                 | شمو                | i ''          |   |
| 10.4                                    | 10.4               | 10.4               | 11                 | 11.4              | 11.4               | Score Match   |   |
|   | 74.3               |                    |                    |                   | 81.4               | 1             | æ |
| 46                                      | 31                 | 19                 | 50                 | 50                | 49                 | Length DB     |   |
| 13                                      | 17                 | 17                 | 14                 | 10                | 10                 | BB            |   |
| BI908094                                | AZ437960           | AZ825396           | H55190             | AV428742          | BE282036           | ID            |   |
| . в в в в в в в в в в в в в в в в в в в | AZ437960 1M0226A14 | AZ825396 2M0100N04 | H55190 CHR220129 C | AV428742 AV428742 | BE282036 601102010 | Description   |   |

|   | O     | O             | C            | O                  | C    | O      |     | C      | O   | C      |        | C                 |          | C        | O        | O        |          | C                  | C          | O        | O        | O         | C                | C                | O              | O              | O        |                | O                 | C        |        |      | C     | O          | C          | C      | O               | O.            | O                 |
|---|-------|---------------|--------------|--------------------|------|--------|-----|--------|-----|--------|--------|-------------------|----------|----------|----------|----------|----------|--------------------|------------|----------|----------|-----------|------------------|------------------|----------------|----------------|----------|----------------|-------------------|----------|--------|------|-------|------------|------------|--------|-----------------|---------------|-------------------|
|   | 45    | 44            | 43           | 42                 | 41   | 40     | 39  | 38     | 37  | ω<br>6 | ω<br>5 | 34                | ω<br>ω   | 3<br>2   | 31       | 30       | 29       | 28                 | 27         | 26       | 25       | 24        | 23               | 22               | 21             | 20             | 19       | 18             | 17                | 16       | 15     | 14   | 13    | 12         | 11         | 10     | 9               | æ             | 7                 |
|   | 9.4   | 9.4           | 9.4          | 9.4                | 9.4  |        |     |        |     |        |        | 9.8               | •        | ٠        | ٠        |          | •        |                    |            |          |          | •         |                  |                  |                | ٠              |          | 9.8            | 10                | 10       | 10     | 10   | 10    | 10         | 10         | 10     | 10              | 10            | 10.4              |
| - | 67.1  | 67.1          | 7.           | 67.1               | 7.   | 7.     | 7.  | 67.1   | 7.  | 7.     | 0      | 0                 | 0        | 0        | 0        | 0        | 0        | 0                  | 0          | 0        | 0        | 0         | 0                | 0                | 0              | 0.             | 70.0     | 0              | _                 | 71.4     | 71.4   | 71.4 | 71.4  | 71.4       | 71.4       | 71.4   | 71.4            | 71.4          | 74.3              |
|   | 37    | 37            | 34           | 33                 | 32   | 30     | 23  | 23     | 23  | 22     | 50     | 50                | 50       | 50       | 49       | 49       | 49       | 48                 | 47         | 43       | 40       | 39        | 38               | 32               | 29             | 28             | 28       | 25             | 50                | 50       | 50     | 50   | 46    | 44         | 42         | ა<br>5 | 34              | 20            | 50                |
|   | 9     | 9             | 13           | 17                 | 17   | 17     | 17  | 17     | 17  | 17     | 14     | 9                 | 9        | 9        | 9        | 9        | 9        | 17                 | 13         | 17       | 9        | 17        | 17               | 17               | 17             | 17             | 17       | 17             | 9                 | 9        | 9      | 9    | 17    | 17         | 14         | 12     | 9               | 17            | 9                 |
| • | 81520 | 52            | J03472       | <b>279</b>         | 316  | Z45629 | 545 | Z48067 | 782 |        | N34794 | AU106942          | AU106721 | AU103167 | AI457977 | AA887238 | AA876193 | AZ485794           | BI221669 , | BH790549 | AA880280 | AZ659162  | TA130F07P        | AZ990297         | AZ492566       | TA163A01P      | AZ327470 | AZ643950       |                   | AU103657 |        | 102  | 86886 | Z48        | 48919      | F03    | 96694           | 19            | AU107443          |
|   |       | 0523 uc70a08. | 34722 вJ0347 | AZ791392 2M0041118 | Z793 | Z456   | 785 | 48C    | 9   | 99     | 79     | AU106942 AU106942 | 67       | 3        | 579      | 72       | 61       | AZ485794 1M0313K24 | 21         | 90       | 02       | 59162 1MO | L464113 T. brúce | 2990297 2M0273N2 | 92566 1M0326F1 | 72207 T. bruce | 70       | 43950 1M0507L1 | AU105659 AU105659 | 3657 1   | 2547 / | 7    | Hu    | 56 1M0319G | yb07c07.s1 |        | 966941 ua38c02. | 819886 2м0091 | AU107443 AU107443 |

# ALIGNMENTS

| FEA   |  | COM  | тА   | REF  | SOURCE                    | ACC<br>VER  | LOCUS  | RES<br>BE2             |
|---|--|--|--|--|---------------------------|---|--|------------------------|
| FEATURES  |  | JOURNAL<br>COMMENT                                   | AUTHORS<br>TITLE   | REFERENCE  | ORGANISM                  | ACCESSION<br>VERSION<br>KEYWORDS                    | LOCUS<br>DEFINITION  | RESULT 1<br>BE282036/c |
| found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov plate: LLAM8543 row: c column: 04 High quality sequence start: 2 High quality sequence stop: 49. Location/Qualifiers | Email: cgapbs-r@mail.nih.gov Tissue Procurement: Gilbert Smith, Ph.D. cDNA Library Preparation: Life Technologies, Inc. cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. | Unpublished (1999) Contact: Robert Strausberg, Ph.D. | NIH-MGC http://mgc.nci.nih.gov/.<br>National Institutes of Health, Mammalian Gene Collection (MGC) | Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 49) | house mouse. Mus musculus | mRNA sequence.<br>BE282036<br>BE282036.1 GI:9157330 | BE282036 49 bp mRNA linear EST 26-OCT 2000 601102010F1 NCI_CGAP_Lu29 Mus musculus cDNA clone IMAGE:3494331 5', |                        |
|   |  |  |  |  |                           |   |  |                        |

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Lotus japonicus

Lotus japonicus

Lotus japonicus

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;

Spermatophyta; Magnoliophyta; Fabaceae; Papilionoideae; Loteae;
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50 bp mRNA linear AV428742 Lotus japonicus young plants (two-week old) japonicus cDNA clone MWM035d10_r 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                           Kazusa DNA Research Institute
Yana 1532-3, Kisarazu, Chiba 292-0812, Japan
Email: asamizu@kazusa.or.jp, URL:http://www.kazusa.or.jp/en/plant/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EST.
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                                                                                           1 CAAGGTCCAGNCCA 14
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DNA Res. 7 (2), 127-130 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Asamizu, E., Nakamura, Y., Sato, S. Generation of 7137 non-redundant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              japonicus cDNA
AV428742
                                                                                                                                                                                                                                                                                                                                                                                                                  The First Laboratory for Plant Gene Research
                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Erika Asamizu
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                                                                                                                                                                                                   /organism="Lotus japonicus"
/db_xref="taxon:34305"
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/clone_lib="Lotus japonicus young plants (two-week old)"
/dev_stage="young plants (two-week old)"
/dev_stage="young plants (two-week old)"
/note="Vector: pbluescriptil SK-; Site_1: EcoRI; Site_2:
xhol; isolate=Miyakojima MG-20"
xhol; isolate=Miyakojima MG-20"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="Organ: lung; Vector: pCMV-SPORT6; Site_1: SalI; Site_2: Not1; Cloned unidirectionally. Primer: Oligo Library constructed by Life Technologies. Investigator providing samples: Gilbert Smith, NIH"

a 11 c 27 g 9 t
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Stem cell origin."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /clone="IMAGE:3494331"
/clone_lib="NCI_CGAP_Lu29"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Mus musculus"
/strain="C2ECH II"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                        location/Qualifiers
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85.7%;
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Pred. No. 4.2e+04;
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Unpublished (2000)
Contact: Robert B. W
University of Utah G
University of Utah
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                                                                                     and Wright, D., Weiss, Mouse whole genome s
                                                                                                                    1 (bases 1 to 19)
Dunn,D., Aoyagi,A., Barber,M., Beat
Islam,H., Longacre,S., Mahmoud,M.,
M., Rose,M., Rose,R., Stokes,R.,
                                                                                                                                                                                                                                                                                                                  2M0100N04R Mouse 10kb plasmid clone UUGC2M0100N04 R, DNA sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Building 149, 13th
Tel: 6177249616
Fax: 6177265736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Molecular Neurogenetics Unit
Massachusetts General Hospital
Building 149, 13th St., Charlestown MA 02129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             An expression-independent catalog Genome Res. 5 (3), 214-224 (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 (bases 1 to 50)
Trofatter, J.A., Lou
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mRNA
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                                                                                                                                                                                             Mammalia; Eutheria;
                                                                                                                                                                                                                                                  house mouse
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
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/lab_host="E. coli DH5a"
/note="Vector: pBluescriptIIKS+;
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91.7%;
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                    Genome
                                                                                     scaffolding
                                                                                                         R
                                                                                                                                                                                           Chordata; Craniata; Vertebrata; Rodentia; Sciurognathi; Muridae;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 11; DB 14;
Pred. No. 6.8e+04;
                                                                                                                                                                                                                                                                                                                    DNA sequence.
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                    Center
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                                                                                                                                                           Beacorn, T.,
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                                                                                                                                        Meenen, E.,
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                                                                                       end
                                                                                                                                                           Duval,B.,
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                                                                                                                                                                                                                                                                                                                                      Mus
                                                                                                                                          Pedersen, T., Reilly
                                                                                       reads
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                                                                                                                          Niederhausern, A.
                                                                                                                                                                                                              Euteleostomí;
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                                                                                                                                                                                             Murinae;
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308, Biomedical Polymers Research Bldg.,

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2030 E.,

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RESULT 5
AZ437960/c
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                                                                                                                             TITLE
                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                         ORGANISM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19 AAGGTCCAGGGCA 7
Contact: Robert B. Weiss
University of Utah Genome Center
University of Utah
                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 31)
Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C.,
                                                                                                                                                                                                                                                                                                                                                                          AZ437960.1 GI:10561973 GSS.
                                                                                                                                                                                                                                                                                                                                                                                                                      1M0226A14R Mouse 10kb plasmid UUGC1M library Mus musculus
clone UUGC1M0226A14 R, DNA sequence.
AZ437960
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Location/Qualifiers
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Insert Length: 10000 Std Erro
Plate: 0100 row: N column: 0
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Fax: 801 585 7177
                                                                                                                                             Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly
,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von Niederhausern,A.
and Wright,D.,Weiss,R.
                                                                                                                                                                                                                                                                                                                         Mus musculus
                                                                          Unpublished (2000)
                                                                                                                           Mouse whole genome
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                                                                                                                                                                                                                                                                                                                                                   house mouse.
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                                                                                                    inserts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWDA2 (gil4732114 gblpAF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to adaptored vector DNA, and transformed into chemically-competent E. coll XL10-Gold (Stratagene) cells and selected for ampicallin resistance."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptored DNA was purified and size-selected for a 9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               musculus C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (http://www.jax.org/resources/documents/dnares/). The DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /db_xref="taxon:10090"
/clone="UUGC2M0100N04"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note="Vector: PWD42nv; Purified genomic DNA from M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Mus musculus
/strain="C57BL/6J"
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84.6%;
                                                                                                                        scaffolding with paired
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RESULT 6
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15 AAGCTCCAGCCCA 3
                                                                                           Contact: Robert Strausberg, Ph:D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.
                                                                                                                                                                                1 (bases 1 to 46)
NIH-MGC http://mgc.nci.nih.gov/.
National institutes of Health, Mammalian
                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                     BI908094
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                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                               B1908094.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tel: 801 585 5606
Fax: 801 585 7177
                                                                                                                                                                  Unpublished (1999)
CDNA Library Preparation: Life Technologies, Inc. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
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/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="UUGC1M0226A14"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 10.4; DB 17;
Pred. No. 1.2e+05;
0; Mismatches 2;
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Homo .
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                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens cDNA clone IMAGE:5216252
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E:5216252 5',
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ORIGIN
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AU107443/c
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  Query Match
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AU107443 Sugano Homo sap
NBLAN134NF, mRNA sequenc
AU107443
AU107443.1 GI:13556964
EST.
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                                                                                                                                                                                                                                                                                                                       Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Email: ysuzuki@ims.u-tokyo.ac.jp
Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and Sugano,S. Construction and characterization of a full length-enriched and a 5'-end-enriched CDNA library. Gene 200 (1-2), 149-156 (1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 CAAGGTCCAGNCC 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J., Hata,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K., Sakaki,Y., Nakamura,Y., Suyama,A. and Sugano,S.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBO Rep. 2 (5), 388-393
21270072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Contact: Yutaka Suzuki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
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/db_xref="taxon:9606"
/clone="IMAGE:5216252"
/clone_lib="NIH_MGC_118"
/tissue_type="leukocyte"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sugano Homo sapiens cDNA library Homo sapiens cDNA clone NF, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note="Wector: pCMV-SPORT6; Site_1: Not1; Site_2: EcoRV (destroyed); RNA source leukocytes from anonymous pool of non-activated adult donors. Library is oligo-dT primed and directionally cloned (EcoRV site is destroyed upon cloning). Average insert size 1,7 kb, insert size range 1.2-3.3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 027. Note: this is a NIH_MGC Library."
                                                                         /Clone_lib="Sugano Homo sapiens cDNA library"
/note="Differential display comparison of untreated
dimethylfumarate treated U937 cells"
/note="Differential display comparison of untreated
dimethylfumarate treated U937 cells"
/note="Differential display comparison of untreated
dimethylfumarate treated U937 cells"
                                                                                                                                                                                                                       /organism="Homo sapiens"
/db_xref="taxon:9606"
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     74.38;
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1. No. 1.4e+05;
1. No. 2;
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and Wright,D.,Weiss,R.
Mouse whole genome scaffolding with paired end
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tel: 801 585 5606
Fax: 801 585 7177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C., Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von Niederhausern,A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               High quality sequence stop: 20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error: 0.00
Plate: 0091 row: H column: 16
Seq primer: CACACAGGAAACAGCTATGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            University of Utah Genome Center University of Utah
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Robert B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unpublished (2000)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 AAGGTCCAGNCCA 14
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                                                                                                                                (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWAP2 (gil4732114)gblAF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and sheared adaptored mouse DNA was annealed to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   USA
                                                      adaptored vector DNA, and transformed into chemically competent E. coli XL10-Gold (Stratagene) and selected for ambicillin resistance."
                                                                                                                 purified. The sheared, adaptored mouse DNA was annealed to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="Vector: PWD42nv; Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
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                                                                                                                                                                                                                                                                                                                                                                                                                                              Laboratory Mouse DNA Resource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /clone_lib="Mouse 10kb plasmid UUGC1M library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /sex="Male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /clone="UUGC2M0091H16"
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                  selected for ampicillin resistance. 3 \text{ c} 4 \text{ g} 6 \text{ t}
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71.48;

Score 10;

DB 17;

Length 20;

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RESULT 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL;
IMAGE Consortium (info@image.llnl.gov) for further
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WashIngton University School of MedicineP
Washington University School of MedicineP
4444 Forest Park Parkway, Box 8501, St. La
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 AAGGTCCAGNC 12
1 CAAGGTCCAG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Trace considered overall poor quality Possible reversed clone: similarity or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Marra M/Mouse EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unpublished (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The WashU-HHMI Mouse EST Project
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubuque,T., Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M., Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B., Theising,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mus musculus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ua38c02.rl Soares_mammary_gland_NbMMG Mus musculus cDNA clone
IMAGE:1348994 5' similar to SW:ATPD_RAT P35434 ATP SYNTHASE DELTA
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a 11 c
                                                                                                                                           T 3']; double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of the modified pTT73 vector. RNA provided by Dr. Minoru Ko, Wayne State Univ. Library constructed and normalized by Bento Soares and M.Fatima
                                                                                                                                                                                                                                                                                                                                                                                             /organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="IMAGE:1348994"
                                                                                                                                                                                                                             /note="Organ: mammary gland; Vector: pT7T3D-Pac (Pharmacia
) with a modified polylinker; Site_1: Not I; Site_2: Eco
RI; 1st strand cDNA was primed with a Not I - oligo(dT)
                                                                                                                                                                                                                                                                                                                                /tissue_type="mammary gland"
/dev_stage="4 weeks"
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                                                                                                                                                                                                                                                                                                                                                                 /sex="male"
                                                                                                                                                                                                                                                                                                                                                                             /clone_lib="Soares_mammary_gland_NbMMG"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unpublished (1999)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Email: cgapbs-r@mail.nih.gov
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9 c
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/db_xref="taxon:9606"
/clone="IMAGE:3863775"
/clone_lib="NIH_MGC_66"
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Hiller, L., Lennon, G., Becker, M., Bonaldo, M.F., Chiapelli, B., Chissoe, S., Dietrich, N., DuBuque, T., Favello, A., Gish, W., Haw, M., Hultman, M., Kucaba, T., Lacy, M., Le, M., Le, N., Mardis, E., B., Morris, M., Parsons, J., Prange, C., Rifkin, L., Rohlfing, T.
                                                                                                                                                                                                                                                                                                                                                                                                  T48919

42 bp mRNA linear EST 06-FEB-1995
yb07c07.s1 Stratagene placenta (#937225) Homo sapiens cDNA clone
IMAGE:70476 3' similar to similar to gb:M17885 60S ACIDIC RIBOSOMAL
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National Institutes of Health, Mammalian Gene Collection (MGC)
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/lab_host="DH10B (phage-resistant)"
/note="Organ: ovary; Vector: pcMV-SPORT6; Site_1: Not1;
Site_2: Sal; Cloned unidirectionally. Primer: Oligo d
Average insert size 1.8 kb. Library constructed by Li
Technologies. "
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V., Mardis, E., Moore
, Rohlfing, T.,
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                                                           University of Utah Genome Center University of Utah
                                                                                                                                                                Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Du
Islam,H., Longacre,S., Mahmoud,M., Meenen,E.,
M., Rose,M., Rose,R., Stokes,R., Tingey,A.,
                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Rodentia;
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1M0319G12R Mouse 10kb plasmid UUGC1M library
clone UUGC1M0319G12 R, DNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Washington University School of Medicine
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97044478
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                                                                                           Contact: Robert B.
                                                                                                         Unpublished (2000)
                                                                                                                                     Mouse whole genome scaffolding with paired end reads from 10kb
                                                                                                                                                       and Wright, D., Weiss, R.
                                                                                                                                                                                                                                                                                                       AZ489056.1 GI:10658433
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Location/Qualifiers
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801 585 7177
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/clone="IMAGE:70476"
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/db_xref="GDB:491373"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /clone_lib="Stratagene placenta (#937225)"
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Pred. No. 2.
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AUTHORS
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D86886/c
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 Ohira, M
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Query Match
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                                         Gene Identification on Chromosome 21
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                                                                                                                                                                                                                                                                                                                                                                              GSS; exon trapping for Down's syndrome region Homo sapiens DNA, clone: E20-10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human exon sequence in 1.6Mb segment encompassing
                Unpublished
                                                                                        Ohki, M
                                                                                                          Ohira,M.,
                                                                                                                                                 Genome Res. (1997) In press
                                                                                                                                                                                chromosome 21
                                                                                                                                                                                                  Gene identification in the 1.6
                                                                                                                                                                                                                         and Ohki, M.
                                                                                                                                                                                                                                            Ohira, M., Seki, N., Nagase, T., Hattori, M., Sakaki, Y., Eki, T.,
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                                                                                                                                                                                                                                                                                                                                      Eukaryota;
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D86886
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(bases 1 to 46)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                musculus C57BL/6J (male) was obtained from the Jackson
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/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="UUGC1M0319G12"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /lab_host="E. Coli strain XL10-Gold, T1-resistant,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /clone_lib="Mouse 10kb plasmid UUGC1M library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /sex="Male"
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Primates;
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                                                                                                            Ichikawa, H.,
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Y., Saito, T.,
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                                                                                                                                                                                                                                                                                                          Suzuki, r., Yoshitomo-Nakagawa, K., Maruyama, K., Suyama, A. and Sugano, S. Construction and characterization of a full length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).
                                                                                                                                                                                                                                                                                                                                                               Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Email: ysuzuki@ims.u-tokyo.ac.jp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Y., Nakamura,Y., Suyama,A. and Sugano,S. Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites EMBO Rep. 2 (5), 388-393 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AU102541 Sugano Homo sapiens HRC07574, mRNA sequence.
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Fax:+81-438-52-3931)
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GGTCCAGTCCA 13
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                                                                                                                                               /clone_lib="Sugano Homo sapiens cDNA library"
/note="Differential display comparison of untreated and dimethylfumarate treated U937 cells"
13 c 23 g 9 t
                                                                                                                                                                                                                        /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="HRC07574"
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/map="21q22.2"
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2.2e+05;
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library Homo sapiens cDNA clone
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RESULT 15
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                                                                                                 4 GGTCCAGNCCA 14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 # -0-1, SHIALDWAND TOKYO. ac.jp
Email: yszuki@ins.u-tokyo.ac.jp
Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 50)
Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J., Hata,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K., Sakaki
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Eukaryota; M
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AU102547 Sugano Homo sapiens
W1000, mRNA sequence.
AU102547
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Department of Virology
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4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
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                                                                              GGTCCAGTCCA
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/db_xref="taxon.9606"
/clone="W1000"
/clone_lib="Sugano Homo sapiens cDNA library"
/note="Differential display comparison of untreated dimethylfumarate treated U937 cells"
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Eutheria; Primates; Catarrhini; Hominidae; Homo.
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| Maximum Match 100%
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score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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| 50     | 40      | 40               | 2 K      | 24              | 36          | 43            | 43              | 43             | ω (<br>5 F | 2 2 0           | 20             | . 47     | 47            | 46    | 46            | کر<br>در |                  | . 4· α       | 4.8           | 42           | 40          | •<br>39       | ب<br>م  | u<br>u<br>v  | 36            | 30               | 50             | 42      | ب<br>د<br>د      | 31        | 22            | 38            | 29            | . 29    | 47              | 31     | ب<br>د د        | 4.<br>4.9  | . 1 | Length        |                 |  |
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| 3271   | 69      | 5913             | ນ ∩<br>ບ | A05412          | 4748        | 꽂             | 63              | w              | E13897     | 2 4             | 9              | 378      | 378           |       | 959           |          | 0000             | 200          | 351           | 50           | 6815        | 439           | 4410    | 4<br>4<br>4  | 466           | 38660            | F0716          | T4480/  | 05675            | 4792      | 685           | 5676          | X41169        | 1168    | 1437            | 73     | 7262            | HUMD2HU4M3 |     | ID            | SUMMARIES       |  |
| R03271 | R169562 | R059136 Sequence | 10 6106  | 05412 Synthetic | X247486 Sec | 551 H.sapiens | R061140 Šequen¢ | 45335 Sequence | PCI.       | K198221 Sequenc | 091186 Sequenc | 874      | 8324 Šequenće | 60 Se | 3959 Sequence | 421 Hur  | 39506 Homo sanie | 514 Sequence | 93513 Sequenc | 509 Sequence | 155 Sequenc | 34391 Sequenc | 44±07 S | 4000 Sequenc | 466 Novel gen | x338660 Sequence | 071670 Mus mus | 804 Seg | XU56/59 Sequence | X247929 S | 66859 Sequenc | 56763 Sequenc | 11691 Sequenc | 11689 S | X114379 Sequenc | 073178 | RO72633 Sequenc | 93 Segment |     | ripti         | · ~ <del></del> |  |

| i                                    | TITLE   | AUTHORS  | REFERENCE         |  |   | ORGANISM     | SOURCE  | KEYWORDS        | VERSION            | ACCESSION | DEFINITION  | LOCUS  | HUMD2H04M3 | RESULT 1 |  |
|--------------------------------------|---|--|-------------------|--|---|--------------|---|-----------------|--------------------|-----------|---|--|------------|----------|--|
| improves analysis of gene expression | The addition of 5'-coding information to a 3'-directed cDNA library | Matoba, R., Okubo, K., Hori, N., Fukushima, A. and Matsubara, K. | 1 (bases 1 to 49) | Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. | Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; | Homo sapiens | Homo sapiens Male cell_line:HepG2 cDNA to mRNA, clone_lib:Kiseru. | gene signature. | D17183.1 GI:598688 | D17183    | Human HepG2 3' region MboI cDNA, clone hmd2h04m3. | HUMD2H04M3 49 bp mRNA linear PRI 04-FEB-1999 |            |          |  |

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              Sequence 63 from patent AR072633
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                                                                                                                                                                                                                                                                                                                                       Sequence 63
AR051493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Submitted (21-JUL-1993) Ryo Matoba, Osaka University, Institute for Molecular and Cellular Bio; 1-3, Yannada-Oka, Suita, Osaka 565, Japan (E-mail:matoba@inherit.imcb.osaka-u.ac.jp, Tel:81-6-877-5111(ex.3314), Fax:81-6-877-1922) Submitted (21-Jul-1993) to DDBJ by:
                                                                                                                                                                                                                               Patent:
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Location/Qualifiers
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/db_xref="taxon:9606"
/sex="Male"
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10 c 8 g
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/clone_lib="Kiseru"
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                                              Schork, N. and Skierczynski, B. Methods of genetic cluster analysis Patent: WO 0129257-A 48 26-APR-2001;
                                                                                                                      Homo sapiens
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                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                             AX114379.1
                                                                                                                                                                                                                                                                                                                                                                                                                      Patent: US 5948888-A 63 07-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unclassified
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/organism="Homo sapiens"
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10 c 8 g
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Sequence 5 from Patent W00228897
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                                                                                                                            Deleersnijder,W., Blockx,H. and de Moor,L
Human 'g-protein coupled receptor and uses
Patent: Wo 0228897-A 7 11-APR-2002;
SOLVAY PHARMACEUTICALS B V (NL)
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Sequence 7 from Patent WO0228897
AX411691
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/db_xref="taxon:32630"
/note="primer"
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AX056763
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                                                                                                                                                                                                                                                                                          synthetic construct. synthetic construct
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Patent: WO 0075319-A 29 14-DEC-2000;
REGENERON PHARMACEUTICALS, INC. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  artificial sequences.
1 (bases 1 to 38)
Papadopoulos,N.J., Davis,S. and Yano
Modified chimeric polypeptides with
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synthetic construct
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Similarity 88.9%;
16; Conservative
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                                                                                                              /note="reverse primer"
5 c 6 g
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/db_xref≈"taxon:32630"
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Pred. No. 4e+04;
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Cargill,M., Ireland,J.S. and Lander,E.S.
                                                                                                                      Ν
                                                                                                                                                                                                                                                                                                                                      artificial sequences.
1 (bases 1 to 38)
Papadopoulos,N.J., Davis,S. and Yancopoulos,G. Modified chimeric polypeptides with improved
                                                                                                                                                                                                                                                                                                                                                                                       synthetic construct synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human single nucleotide polymorphisms
Patent: WO 0166800-A 8 13-SEP-2001;
WHITEHEAD INSTITUTE FOR BIOMEDICAL RESEARCH (US)
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                     I44807.1
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ON PHARMACEUTICALS, INC. (US)
Location/Qualifiers
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25 from Patent WO0075319
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/db_xref="taxon:9606"
7 c 8 g
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/db_xref="taxon:32630"
/note="primer"
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I44804
                                                                           Eukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus 1 (bases 1 to 50) Klonowski, K.D., Primiano, L.L. and Monestier, M. Atypical VH-D-JH rearrangements in newborn autoimmune MRL mice 1. Immunol. 162 (3), 1566-1572 (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19;
   Direct Submission Submitted (12-JUN-1998) Microbiology and Immunology, Temple
                             2 (bases 1 to 50)
Monestier, M. and Klonowski, K.
                                                                   99138837
                                                                                                                                                      Mus musculus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unclassified
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Pastan, I.H., Kreitman, R.J. and Puri, R.
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Search completed: June 21, 2003, 22:14:23 Job time: 607.344 secs
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Matches 19
                                                                                                        Query Match 48.0%; Score 14.4; DB 6; Best Local Similarity 75.0%; Pred. No. 9.7e+04; Matches 18; Conservative 0; Mismatches 6;
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                                                    Gasche, C., Zakeri, S.M. and Reinisch, W. Mammalian interleukin-10 (il-10) receptor variants Patent: Wo 0164713-A 25 07-SEP-2001; Gasche, Christoph (AT); Zakeri, Schaker M. (AT) Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                    synthetic construct.
synthetic construct
artificial sequences.
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Sequence 25 from Patent WO0164713.
AX338660
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19; Conserv
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/note="possible frameshift at D-J junction during
/note="possible frameshift at D-J junction during
rearrangement may result in nonfunctional immunoglobulin
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9 c
                                                                                                                                                                                           /organism="synthetic construct"
/db_xref="taxon:32630"
/note="cDNA"
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/strain="MRL +/+"
/db_xref="taxon:10090"
/clone="MPJ-09"
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/dev_stage="newborn"
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Pred. No. 5.9e+04;
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GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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                                     | SIDS2/gcgdata/geneseq/geneseqn-emb1/NA1986.DAT: *
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| SIDS2/gcgdata/geneseq/geneseqn-emb1/NA1991.DAT: *
| SIDS2/gcgdata/geneseq/geneseqn-emb1/NA1992.DAT: *
| SIDS2/gcgdata/geneseq/geneseqn-emb1/NA1993.DAT: *
| SIDS2/gcgdata/geneseq/geneseqn-emb1/NA1993.DAT: *
| SIDS2/gcgdata/geneseq/geneseqn-emb1/NA1995.DAT: *
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| SIDS2/gcgdata/geneseq/geneseqn-emb1/NA2001A.DAT: *
| SIDS2/gcgdata/geneseq/geneseq-emb1/NA2001A.DAT: *
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

| c 9 15.2          | c 8 15.2           | c 7 15.4           | c 6 15.4           | 5 16               | 4 16               | 3 16              | c 2 16.2           | c 1 16.6           | No. Score   | Result |   |
|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|--------------------|-------------|--------|---|
| -                 | -                  |                    | 51.3               |                    | -                  |                   |                    |                    | 1 -         | Query  | æ |
| 45                | 38                 | 29                 | 29                 | 50                 | 47                 | 47                | 24                 | 24                 | ength       |        |   |
| 21                | 22                 | 24                 | 24                 | 16                 | 22                 | 21                | 24                 | 24                 | •           |        |   |
| AAA28244          | AAA91086           | AAD31164           | AAD31162           | AAT25713           | AAF89248           | AA266299          | ABN89564           | ABA05479           | ID          |        |   |
| Upstream45 primer | PCR primer Flt1D2. | Human IGS43 GPCR D | Primer IP14924 for | Human gene signatu | Sample member clus | Human map-related | Human uracil monon | Human RNA gyrase 1 | Description |        |   |

New polypeptide-human RNA unwindase 12 and polynucleotide encoding the polypeptide -

WPI; 2002-049927/07.

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| O        |            | O    |             | C         |                    | O        | C        | C                  |          |          |                    | a                  |                    | ဂ                  |                   |          |          |                    | ი        | O        |          |       |          | ဂ        |          | C        | O        |           | O        |          | C                  |            | O              |                 |                   |
|----------|------------|------|-------------|-----------|--------------------|----------|----------|--------------------|----------|----------|--------------------|--------------------|--------------------|--------------------|-------------------|----------|----------|--------------------|----------|----------|----------|-------|----------|----------|----------|----------|----------|-----------|----------|----------|--------------------|------------|----------------|-----------------|-------------------|
| 45       | 44         | 43   | 42          | 41        | 40                 | 39       | 38       | 37                 | 36       | 3<br>5   | 3<br>4             | ω<br>ω             | 32                 | 31                 | 30                | 29       | 28       | 27                 | 26       | 25       | 24       | 23    | 22       | 21       | 20       | 19       | 18       | 17        | 16       | 15       | 14                 | 13         | 12             | 11              | 10                |
| 13.8     | 13.8       | w    | w           | 14        | 14                 | 14       | 14       | 14                 | 14       | 14       | 14                 | 14                 | 14                 | 14                 | 14.2              | 4        | 4        | 14.2               | 4        | 4        | 14.2     | 4     | 14.2     | 14.2     | 14.4     |          |          | ٠         |          |          |                    |            |                | 14.8            | 14.8              |
|          | 46.0       |      |             |           |                    | •        |          |                    |          |          |                    |                    |                    |                    |                   |          |          |                    |          |          |          |       |          |          |          |          | ٠        |           |          |          |                    |            |                | 49.3            | 49.3              |
| 35       | 31         | 31   | 26          | 47        | 47                 | 46       | 41       | 28                 | 27       | 27       | 24                 | 24                 | 24                 | 24                 | 48                | 41       | 41       | 41                 | 40       | 39       | 39       | 39    | 39       | 36       | 49       | 49       | 47       | 30        | 45       | ω<br>ω   | 24                 | 42         | 39             | 38              | 22                |
| 18       | 22         | 20   | 24          | 24.       | 24                 | 13       | 24       | 24                 | 19       | 19       | 24                 | 24                 | 24                 | 24                 | 1.8               | 24       | 19       | 19                 | 22       | 22       | 21       | 21    | 21       | 20       | 22       | 22       | 21       | 22        | 21       | 21       | 22                 | 16         | 16             | 22              | 24                |
| AAT94899 | æ          | N    | ABK67218    | ABK41287  | ABK40865           | AAQ24360 | ABL42407 | AAL46329           | AAV54819 | AAV33786 | AAI69204 ·         | ABI87281           | ABI87280           | ABK49469           | AAT88795          | ABQ77609 | AAV50842 | AAV50841           | AAF67684 | AAS03144 | AAC89290 | 7     | AAC87155 | AAX88249 | AAI62905 | AAK65537 | AAZ69526 | AAH27041  | AAA07136 | AAA88764 | AAH76860           | AAT08198   | AAT08201       | 0               | ABL92859          |
|          |            |      |             |           |                    |          |          |                    |          |          |                    |                    |                    |                    |                   |          |          |                    |          |          |          |       |          |          |          |          |          |           |          |          |                    |            |                |                 |                   |
|          |            |      |             |           |                    |          |          |                    |          |          |                    |                    |                    |                    |                   |          |          |                    |          |          |          |       |          |          |          |          |          |           |          |          |                    |            |                |                 |                   |
| genomic  | single nuc | bial | gene specif | USF2 gene | Human obesity-asso | .de p    |          | M30 protein vector | Ξ,       |          | Human tyrosinase 1 | Capture oligonucle | Capture oligonucle | Human cell divisio | Feline parvoviral |          | sp.      | Brassica sp. polym | sulator  | novel    |          | r G1. |          | CRT-1 DI |          |          | ക        | terleukin | _        | н        | Human tyrosinase 1 | lification | plification pr | CR primer flt1D | G protein-coupled |

## ALIGNMENTS

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RESULT 1
ABA05479/c
Human; RNA gyrase 12; malignant tumour; haemopathy; HIV; infection; human immunodeficiency virus; immunological disease; inflammation;
                                                                                                                                                                                                                         01-MAR-2002
                                                                             02-MAR-2000; 2000CN-0111862.
                                                                                               02-MAR-2000; 2000CN-0111862
                                                                                                               05-SEP-2001.
                                                                                                                                 CN1311325-A
                                                                                                                                                 Homo sapiens.
                                                                                                                                                                   enzyme; PCR primer; ss
                                                                                                                                                                                                      Human RNA gyrase 12 PCR primer SEQ ID NO 4.
                                                                                                                                                                                                                                          ABA05479;
                                                                                                                                                                                                                                                           ABA05479 standard;
                                                           (BODE-) BODE GENE DEV CO LTD SHANGHAI
                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                           DNA;
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RESULT 2
ABN89564/c
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Best Local S
Matches 19
                                                                              Query Match
Best Local
                                                                     Matches
                                                                                                                                              The present invention describes human uracil mononucleotide synthetase 9.9 (1). Also described is a process for producing (I) using DNA recombination technology. (I) and the polynucleotide encoding it can be used in the treatment of various diseases. The present sequence represents a PCR primer for (I), which is used in an example from the
                                                                                                                                                                                                                                      A human uracil mononucleotide synthetase 9.9 polypeptide, polynucleotide encoding it, for treating various diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABN89564 standard;
                                                                                                               Sequence 24
                                                                                                                                                                                                                                                                                                                                            07-JUL-2000; 2000CN-0117079
                                                                                                                                                                                                                                                                                                                                                                   07-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                                             CN1333341-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABN89564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           this polypeptide and DNA recombinant techniques to produce this polypeptide. The present invention also discloses a method of applying this polypeptide to treat various diseases, such as malignant tumour, haemopathy, HIV infection, immunological diseases and various
                                                                                                                                                                                                                                                                           WPI; 2002-340719/38
                                                                                                                                                                                                                                                                                                                                                                                        30-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; uracil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example
                                                                                                                                       present invention.
                                                                                                                                                                                                                   Example
                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo
                                                                                                                                                                                                                                                                                                                      (SHAN-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               inflammations. The present sequence is that of a PCR primer, useful to
                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                    sapiens
                         23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24
                                                                     18;
                                                                                                                                                                                                                                                                                                 Xie
                                                                                                                                                                                                                  2; Page 16 (Disclosure); 34pp; Chinese.
                                                                                                                                                                                                                                                                                                                       SHANGHAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2; Page 17 (Disclosure); 33pp; Chinese.
                         CCTGGGCAAGAGTGAGACTCC
                                    CCTGGGTAAGAGTGGGACACC 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCCTGGGTAAGAGTGGGACACC 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP; 3 A; 10 C; 6
                                                                    Conservative
                                                                                                               BP; 4 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                   2000CN-0117079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mononucleotide synthetase 9.9 PCR primer 2 SEQ ID NO:4
                                                                                                                                                                                                                                                                                                                                                                                                                                                         mononucleotide synthetase
                                                                                                                                                                                                                                                                                                                       BIODOOR GENE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA;
                                                                                                               9 C;
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82.6%;
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85
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      human RNA gyrase 12, the polynucleotide encoding
                                                                                                               6 G;
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                                                                    0;
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                                                                              Score
Pred.
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                                                                                                               5 T;
                         w
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                                                                    Mismatches
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                                                                              16.2;
No. 6.
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                                                                                                               0 other;
                                                                                                                                                                                                                                                                                                                      QI7
                                                                6.5e+02;
3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        9.9; enzyme;
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                                                                                        24;
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                                                                    Indels
                                                                                         Length
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                                                                   Gaps
                                                                    0;
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RESULT 4
AAF89248
ID AAF8
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1

AAF89248 standard;

DNA;

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RESULT 3
AAZ66299
В
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                                                                                                                               Query Match
Best Local 9
                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                            invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AAZ69579 to AAZ77440 represent amplification primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           genomic map; haplotype; phenotype; polymorphic base; haplotyping; hybridisation; identification; charactediagnosis; single nucleotide polymorphism; SNP; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human genome; genomic map;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAZ66299 standard;
                                                                                                                                                                                                                                                                                    and 3367, are not actually given
                                                                                                                                                                                                                                                                                                                                                                       effects from pharmaceutical agents acting on a disease as well
                                                                                                                                                                                                                                                                                                                                                                                             pharmaceutical agents and diagnostic methods, as well as the characterisation of the differential efficacious responses \mathfrak t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel biallelic markers map of the human genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cohen D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-APR-1998;
23-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human map-related biallelic marker SEQ ID NO:646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10-SEP-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 variation
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                                                                                                                                                                                                                                                                                                                                                 treatment
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  10
                                                                                                      19;
                                                                                                                                 Similarity
                           CATCCTGGGTAAGAGTGGGACACC
                                                                                                                                                                                                               47
                                                                                                                                                                                                                                                                   present invention
                                                                                                                                                                                                                                                                                                                     SEQ ID NOS 2852,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Page 368;
CATCCTGGCTAACAGAGTGAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Blumenfeld
                                                                                                                                                                                                               BP;
                                                                                                      Conservative
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RESULT 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Genetic clustering by distributing members into optimal numbers clusters determined by a hierarchical clustering algorithm or by paired-pair analysis of homozygous pairs in clusters got from non-hierarchical clustering -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI;
                                                                                                    Gene signature; messenger RNA; mRNA; relative abundance; frequency; human; clohing; mapping; non-biased library; diagnosis; detection;
                                                                                                                                                                                                                                                                                                                                                                                                                                  AAT25713 standard;
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07-JUL-2000; 2000US-0216897.
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Homo sapiens
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                                                                                                                                                                                                             Human gene signature HUMGS07919
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     present sequence was used to demonstrate the method of the invention.
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RESULT 6
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                                           osteoporosis; inflammation; infection; human immunodeficiency virus; cancer; immune disorder; urinary retention; asthma; allergy; arthrit; benign prostatic hypertrophy; endotoxin shock; sepsis; gene therapy;
                                                                                           episodic and paroxysmal anxiety disorder; Parkinson's disease; multiple sclerosis; Alzheimer's disease; cardiovascular disease; heart fallure; angina pectoris; kidney disease; dyslipidaemias; obesity; emesis; gastrointestinal disorder; inflammatory bowel disease; diabetes;
                             benign prostatic hypertro
gynaecological disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The appearance frequency of a given GS in a cDNA library determined (esp. using primers and probes derived from the sequences) as a means of diagnosing abnormal cell functions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A single-stranded DNA (or its complementary strand or the corresp. double-stranded DNA) which comprises one of the 7837 "GS" sequences
                                                                                                                                                            psychiatric disorder; central nervous system disorder; schizophrenia;
                                                                                                                                                                               colon;
                                                                                                                                                                                                                            Primer IP14924 for cloning human IGS43 GPCR cDNA
                                                                                                                                                                                                                                                                                                                                AAD31162 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Identifying gene signatures in 3'-directed human cDNA library - for diagnosis of abnormal cell function, by preparing cDNA that
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                                                                                                                                                                                               IGS43; G-protein coupled receptor;
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(OKUB/) OKUBO K.
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76.0%;
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stomach; mammary gland; prostate;
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                             vaccine; human; PCR primer;
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Homo sapiens

WO200228897-A2

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                                                                                       Matches
                                                                                                                                                                                                                                                                                         dyslipidaemias, obesity, emesis, gastrointestinal disorders including irritable bowel syndrome, inflammatory bowel disease, diabetic gastroparesis and diabetes, ulcers, diarrhoea, osteoporosis, inflammations, infections including bacterial, fungal, protozoan and viral infections, particularly human immunodeficiency virus (HIV)-1 or HIV-2 infections, pain, cancers, chemotherapy induced injury, tumour invasion, immune disorders, urinary retention, asthma, allergies, arthritis, benign prostatic hypertrophy, endotoxin shock, sepsis, complications of diabetes mellitus, and gynaecological disorders. The polypeptide and polynucleotide of the invention are also useful as research reagents and materials for discovery of treatments and diagnostics to animal and human diseases. The polynucleotide is also useful for Chromosome identification. The polypeptide is also usef
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               anxiety disorder, autism, delirium, multiple sclerosis, Alzheimer's disease, dementia, severe mental retardation, Huntington's disease, dyskinesias, Tourette's syndrome, tics, tremor, dystonia, spasms, anorexia, bulimia, stroke, addiction/dependency/craving, sleep disorder, epilepsy, migraine, attention deficit/hyperactivity disorder, cardiovascular diseases including heart fallure, angina pectoris, arrhythmias, myocardial infarction, cardiac hypertrophy, hypotension, hypertension, thrombosis, arteriosclerosis; cerebral vasospasm, subarachnoid haemorrhage, cerebral ischaemia, cerebral infarction,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel G-protein coupled receptor, termed IGS43 polypeptide and nucleic acid encoding the polypeptide, useful for treating disorders of uterus kidney, lung, colon, stomach, mammary gland, prostate and testis -
                                                                                                                                                                       Sequence 29
                                                                                                                                                                                                                                     cells, cell-free preparations, chemical libraries and natural product mixtures. The present sequence is a PCR primer used for cloning human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         schizophrenia, episodic and paroxysmal anxiety disorders e.g. obsessive compulsive disorder, post traumatic disorder, phobia and panic, major depressive disorder, bipolar disorder, Parkinson's disease, general anxiety disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                intestine, stomach, mammary gland, prostate, testis, central nervous system, cerebellum and spinal cord. The polypeptide is useful as vaccine for inducing immunological response in a mammal, for treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; Page 33; 59pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     02-OCT-2000; 2000EP-0203411
04-OCT-2000; 2000US-237394P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              psychiatric and central nervous system disorders including
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    polynucleotide encoding it. The IGS43 polypeptide, polynucleotide, agonist, antagonist or antibody is useful for treating dysfunctions or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to IGS43 G-protein coupled
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Deleersnijder W,
                                                                                                                                                                                                                                                                           for assessing the binding of small molecule substrates and ligands in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                peripheral vascular disease, Raynaud's disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (SOLV ) SOLVAY PHARM BV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-SEP-2001; 2001WO-EP11319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              isorders related to uterus, kidney, lung, trachea, colon,
                                                                                                                                                                                                                 GPCR CDNA
27
                                                                                                        Similarity
                                        AGAGTGGGACACCTGTG
                                                                                                                                                                       BP; 5 A;
                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Blockx H,
                                                                                                    51.3%;
94.1%;
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11
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                                                                                                                                                                     G;
                                                                                                      Score 15.4; DB 24
Pred. No. 1.6e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   De Moor
                                                                                                                                                                       æ
                                                                                  Mismatches
                                                                                                                                                                       T; 0 other;
                                                                                                                          DB 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                kidney disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 receptor (GPCR) and the
                                                                                                                          Length
                                                                                  Indels
                                                                                                                                                                                                                                   cloning human
                                                                                                                            29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     small
                                                                                                                                                                                                                                                                                                    is also useful
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DR XX
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PR
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                                                                                                                                                                                                            dyskinesias, Tourette's syndrome, tics, tremor, dystónia, spasms, anorexia, bulimia, stroke, addiction/dependency/craving, sleep disorder, epilepsy, migraine, attention deficit/hyperactivity disorder, cardiovascular diseases including heart failure, angina pectoris, arrhythmias, myocardial infarction, cardiac hypertrophy, hypotension, hypertension, thrombosis, arteriosclerosis, cerebral vasospasm, subarachnoid haemorrhage, cerebral ischaemia, cerebral infarction,
                                                            irritable bowel syndrome, inflammatory bowel disease, diabetic gastroparesis and diabetes, ulcers, diarrhoea, osteoporosis, inflammations, infections including bacterial, fungal, protozoan and viral infections, particularly human immunodeficiency virus (HIV)-1 or
                                                                                                                                                                                                                                                                                                                                                                                                                                 for inducing immunological response in a mammal, for treating psychhatric and central nervous system disorders including schizophrenia, episodic and paroxysmal anxiety disorders e.g. obsest compulsive disorder, post traumatic disorder, phobia and panic, maj depressive disorder, bipolar disorder, parkinson's disease, general
               HIV-2 infections, pain, can invasion, immune disorders,
                                                                                                                                                               dyslipidaemias, obesity, emesis, gastrointestinal disorders including
                                                                                                                                                                                                                                                                                                                                                                                      anxiety disorder, autism, delirium, multiple sclerosis, Alzheimer's disease, dementia, severe mental retardation, Huntington's disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           intestine, stomach, mammary gland, prostate, testis, central nervous system, cerebellum and spinal cord. The polypeptide is useful as vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel G-protein coupled receptor, termed IGS43 polypeptide and nucleic acid encoding the polypeptide, useful for treating disorders of uterus, kidney, lung, colon, stomach, mammary gland, prostate and testis -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             02-OCT-2000; 2000EP-0203411.
04-OCT-2000; 2000US-237394P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      osteoporosis; inflammation; infection; human immunodeficiency virus; cancer; immune disorder; urinary retention; asthma; allergy; arthrit. benign prostatic hypertrophy; endotoxin shock; sepsis; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             episodic and paroxysmal anxiety disorder: Parkinson's disease; multiple sclerosis; Alzheimer's disease; cardiovascular disease; heart failure; anglna pectoris; kidney disease; dyslipidaemias; obesity; emesis; gastrointestinal disorder; inflammatory bowel disease; diabetes;
                                                                                                                                                                                        peripheral vascular disease, Raynaud's disease, kidney disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               polynucleotide encoding it. The IGS43 polypeptide, polynucleotide, antagonist or antibody is useful for treating dysfunctions or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2002-426102/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Deleersnijder W, Blockx H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human IGS43 GPCR DNA amplifying primer IP15332.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAD31164 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to IGS43 G-protein coupled receptor (GPCR) and the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (SOLV ) SOLVAY PHARM BV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-SEP-2001; 2001WO-EP11319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gynaecological disorder; vaccine; human; PCR primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             psychiatric disorder; central nervous system disorder; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        isorders related to uterus, kidney, lung, trachea, colon,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      G-protein coupled receptor; GPCR; uterus; small intestine; stomach; mammary gland; p
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2; Page 36; 59pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                        pain, cancers, chemotherapy induced injury, tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             De Moor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      prostate;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                trachea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                small
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         obsessive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    major
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      obesity;
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Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAA91086/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 8
                         Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               complications of diabetes mellitus, and gynaecological disorders. The polypeptide and polynucleotide of the invention are also useful as research reagents and materials for discovery of treatments and diagnostics to animal and human diseases. The polynucleotide is also useful for chromosome identification. The polypeptide is also useful for assessing the binding of small molecule substrates and ligands in cells, cell-free preparations, chemical libraries and natural product mixtures. The present sequence is a PCR primer used for amplifying human
                                                                                                   sequences encoding the fusion proteins of the invention between the F1:1 receptor and the Fc region of IgG. The specification relates to modified chimeric polypeptides with improved pharmacokinetics. The modified chimeric polypeptides are preferably F1:1 receptor polypeptides that have been modified to improve their pharmacokinetic profile. The polypeptides can be used to decrease or inhibit plasma leakage and/or vascular permeability in a mammal.
                                                                             Sequence 38
                                                                                                                                                                                                 This sequence represents a PCR primer used to construct DNA
                                                                                                                                                                                                                          Example 17; Page 63; 159pp; English.
                                                                                                                                                                                                                                                                                 Nucleic acid molecule encoding mammalian phospholipid transfer protein, and its fragments, useful for diagnosis, evaluation, and treatment of
                                                                                                                                                                                                                                                                                                                                                                                                       08-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Flt1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             05-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAA91086;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAA91086 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 29 BP; 4 A;
                                                                                                                                                                                                                                                                   diseases associated with the gene expression and for producing model
                                                                                                                                                                                                                                                                                                                           WPI; 2001-071076/08
                                                                                                                                                                                                                                                                                                                                                                                                                                23-MAY-2000; 2000WO-US14142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200075319,-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            plasma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PCR primer Flt1D2.VEGFR3D3.s for Flt1 receptor fusion DNA sequence
                                                                                                                                                                                                                                                                                                                                                                              (REGE-) REGENERON PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IGS43 GPCR DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14 AGAGTGGGACACCTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           leakage;
3 CATCCTGGGTAAGAGTGGGACACCTGTG 30
                       20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGAGAGGGACACCTGTG
                                                                             BP; 9 A; 9 C; 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                    ĽN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         fusion protein; chimeric; vascular permeability; I
                                                                                                                                                                                                                                                                                                                                                                                                        99US-0138133
                                                                                                                                                                                                                                                                                                                                                    Davis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    51.3%;
                                     50.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10 C; 8
                                                                                                                                                                                                                                                                                                                                                   s,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   38
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                         0;
                         Score 15.2; Defended no. 2e+0
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                    Yancopoulos
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 15.4;
Pred. No. 1.
                                                                             G; 9 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             G;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IgG Fc region;
                                     2e+03;
                                                                                                                                                                                                                                                                                                                                                    G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .6e+03;
                                                   DB
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                                                  22;
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                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pharmacokinetic;
                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
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                         Indels
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                                                     38;
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                         Gaps
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ABL92859

ABL92859 standard;

DNA;

22

ВP

RESULT 10

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RESULT 9
AAA28244/c
AAA282
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DЪ
                                QΥ
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Best Local
                                                                     Matches
                                                                                                                                                                    germination and proliferation of S. cerevisiae and using the identified genes or their encoded proteins as targets for highly specific antifungal agents, insecticides, herbicides and antiproliferation drugs. The invention includes examples of the use of the method, comprising the formation, and characterisation of a number of S. cerevisiae genes to determine if they are essential for growth of the yeast. The present sequence represents a PCR primer used in the construction and analysis of the S. cerevisiae YJR012C mutant strain.
                                                                                                                                                                                                                                                                                          gene useful for the design or discovery of an antifungal agent. The method comprises disrupting the function of a gene in a yeast cell, and identifying whether the function is essential for germination, growth, pseudohyphal growth or hyphal growth. The invention further comprises determining whether the protein encoded by the essential gene has homology to a mammalian, plant or insect protein. The methods are useful for identifying genes in Saccharomyces cerevisiae which are essential for germination and proliferation of S. cerevisiae and using the identified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Identifying a target gene for design or discovery of an antifungal agent, insecticide, or herbicide, comprising disrupting the function a gene in a yeast cell and identifying whether the function is essential for e.g. germination -
                                                                                                                                      Sequence 45 BP; 20 A; 10 C; 7 G; 8 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                        This invention relates to a method for the identification of a target
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Saccharomyces cerevisiae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Upstream45 primer used in the construction of mutant YJR012C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAA28244;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAA28244 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Essential gene identification; antifungal agent;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (ROSE-) ROSETTA INPHARMATICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     growth; pseudohyphal growth;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nerbicide;
45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29
                                  3 CATCCTGGGTAAGAGTGGGA
                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTCCTGGGCAACAGCTGGATATCTATG
CATTCTTGGTAAGAGTCGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          for e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PCR primer;
                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000WO-US08641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99US-0127272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       156pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         entry;
                                                                                   50.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rowth; hyphal growth; YJR012C; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ВP
                                                                 0;
                                                                 Score 15.2; r
Pred. No. 2e+0
0; Mismatches
26
                                  22
                                                                                  2e+03;
                                                                                                      DΒ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gent; yeast; germination;
proliferation; insectici
                                                                                                    21;
                                                                                                    Length
                                                                   Indels
                                                                                                    45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       insecticide
                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tunction
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene
                                                                 Gaps
                                                                                                                                                                                                                                                                                                                tor
                                                                 0;
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ABL92859

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05-JAN-2001

05-JAN-2001

08-JAN-2001

09-JAN-2001

10-JAN-2001

10-JAN-2001

22-JAN-2001

23-JAN-2001

01-FEB-2001

01-FEB-2001
                         expression or the amount of nucleic acid with another mammal not having or not pro
                                                                                    GPCR associated disorders such as cardiomyopathy, atherosclerosis, or a disorder related to cell signal processing and metabolic pathway modulation, in humans. GPCR proteins and the polynucleotides encoding them are useful for determining the presence of or predisposition to a
                                                                                                                                                       and antiinflammatory. They can be used in gene therapy and vaccine production. The GPCR proteins can be used for treating or preventing
                                                                                                                                                                                                                        (GPCR) designated GPCR1-36 from the present invention. The GPCRs can have activities such as: antidiabetic; anorectic; immunomodulator; cytostatic; neuroprotective; nootropic; antiparkinsonian; analgesic; osteopathic; nimmunosuppressive; metabolic; ophthalmological; antibacterial; virucide;
                                                                                                                                                                                                                                                                                                                                                          New G-protein coupled receptor polypeptides and nucleic acids, useful for diagnosis, prevention or treatment of hematopoietic, neurodegenerative, immune and signal transduction pathway disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Spytek KA,
Casman SJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           immunomodulator; neuroprotective; nootropic; antiparkinsonian; metabolic immunosuppressive; ophthalmological; antibacterial; virucide; fungicide; protozoacide; hypertensive; hypotensive; analgesic; osteopathic; antiulcer; antiasthmatic; antiallergic; anti-HIV; antilipaemic; vaccine; antiinfertility; antiinflammatory; haemostatic; cell signal processing; cardiomyopathy; atherosclerosis; metabolic pathway modulation; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 റ
proteins
                                                                                                                                                                        fungicide; protozoacide; hypertensive; hypotensive; anti-HIV; antiulcer; antiasthmatic; antilipaemic; antiallergic; antiinfertility; haemostatic; and antiinflammatory. They can be used in gene therapy and vaccine
                                                          proteins and polynucleotides,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-AUG-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200212343-A2
                                                                                                                                                                                                                                                                                                                            Example 2; Page 357; 492pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Larochelle WJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (CURA-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               protein-coupled receptor GPCR10 PCR primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -AUG-2000;
                                                                                                                                                                                                                                                                                             present invention describes novel human
                                                                                                                                                                                                                                                                                                                                                                                                                                2002-217180/27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               G protein-coupled receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURAGEN CORP
                                       especially cancer associated with altered levels of GPCR and polynucleotides, by measuring the level of protein on or the amount of nucleic acid from a mammal and compari
          are also useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001US-260283P
2001US-260450P
2001US-261156P
2001US-263334P
2001US-263434P
2001US-265704P
2001US-269964P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Vernet CAM,
Mezes PS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Padigaru M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2001WO-US24787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2001US-287916P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2001US-274873P
2001US-276406P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2001US-260072P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2001US-260003P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000US-224815P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000US-224613P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Taupier
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Zerhusen BD, Baumgartner JC, Li
Ballinger RA, Shenoy SG, Kekuda
Grosse WM, Alsobrook JP, Gorman I
RJ, Colman SD, Szekeres ES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SS
          identifying an agent,
                         or not predisposed to the disease. GPCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antidiabetic;
                                                                                                                                                                                                                                                                                        G protein-coupled receptors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               anorectic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gorman L; ES;
          especially cellular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NO:341
                                       and comparing it
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           72 F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             metabolic;
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TCCTGGGCAACAGCTGGATATCTATG

30 27

RESULT 12

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RESULT 11
AAA91083
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                         Matches
                                                Query Match
                                      Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                       This sequence represents a PCR primer used to construct DNA sequences encoding the fusion proteins of the invention between the Flt1 receptor and the Fc region of 19G. The specification relates to modified chimeric polypeptides with improved pharmacokinetics. The modified chimeric polypeptides are preferably Flt1 receptor polypeptides that have been modified to improve their pharmacokinetic profile. The
                                                                                                                                                                                                                                              Nucleic acid molecule encoding mammalian phospholipid transfer and its fragments, useful for diagnosis, evaluation, and treatm diseases associated with the gene expression and for producing
                                                                        Sequence 38 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            candidate substance interacting with an olfactory receptor its fragments or variants. The present sequence represents used in the isolation of a novel human GPCR in the present
                                                                                                                                                                                                          Example 17; Page 62; 159pp; English
                                                                                                                                                                                                                                     systems
                                                                                                                                                                                                                                                                                                WPI; 2001-071076/08
                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200075319-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              plasma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Flt1 receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAA91083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAA91083 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 22 BP; 7 A; 5 C; 6 G; 4 T; 0 other;
                                                                                                            polypeptides can be used to decrease or inhibit plasma
                                                                                                                                                                                                                                                                                                                        Papadopoulos NJ, Davis
                                                                                                                                                                                                                                                                                                                                                (REGE-)
                                                                                                                                                                                                                                                                                                                                                                                                23-MAY-2000; 2000WO-US14142
                                                                                                                                                                                                                                                                                                                                                                                                                        14 - DEC - 2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 receptor or a downstream effector that binds to GPCR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
 U
                         19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              leakage;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ū
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3 CATCCTGGGTAAGAGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16;
                                      Similarity
                                                                                                                                                                                                                                                                                                                                                REGENERON PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
TCCTGGGTAAGAGTGGGACACCTGTG
                                                                                                permeability in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATCCTGGGTAAGAAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Flt1D2.VEGFR3D3.as
                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             fusion protein; chimeric protein; pharmacokinetic;
; vascular permeability; IgG Fc region; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                         99US-0138133
                                                                          8
A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA;
                                   49.3%;
73.1%;
                                                                        6 C; 10 G; 14 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  49.3%;
88.9%;
                                                                                                                                                                                                                                                                                                                       ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          38
                                                                                                  a mammal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20
                         0;
                                                                                                                                                                                                                                                                                                                       Yancopoulos GD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0,
                                      Pred. No.
                                                Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for Flt1 receptor fusion DNA sequence
                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                14.8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14.8;
                                      3e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2.8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 24;
                                                DB 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                            and treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for screening
                                                                                                            leakage and/or
                                                 38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       polypeptide,
a PCR primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               invention
                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                model
                                                                                                                                                                                                                                                                      protein,
                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SS
                        0
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AAT08201/c

ID AAT08201 standard; DNA; 39

AC AAT08201;

XX AAT08201;

XX 28-MAY-1996 (first entry:
XX Linker; interleukin-4; in:
KW Linker; interleukin-4; in:
KW cancer; therapy; granulocy
kw cancer; therapy; granulocy
KW polymerase chain reaction
XX Synthetic.

XX W09527732-A2.

XX Circularly permuted ligar
PT interleukin(s) or colony-
PT Circularly permuted ligar
PT interleukin(s) or colony-
PT binding specificity and a
XX AT08176-T08219 represent
CC of modified ligands. The
CC sequence joined to a linical
CC interleukin-4 (II-4), IL
CC (G-CSF) and granulocyte-
CC interleukin-4 (II-4), IL
CC Geguence was used in con
CC of IL-2 for use in a mod
CC another protein (preferr
CC sequence was used in con
CC of IL-2 for use in a mod
CC another protein (preferr
CC sequence was used in con
CC of IL-2 for use in a mod
CC another protein (preferr
CC sequence was used in con
CC of L-2 for use in a mod
CC another protein (preferr
CC sequence was used in con
CC of L-2 for use in a mod
CC another protein (preferr
CC sequence was used in con
CC of L-2 for use in a mod
CC where the two copies of
XX

Sequence 39 BP; 7 A; 10
      XXX DXX AXI
                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                             ρ
                                                                                                                                                                                                   AAT08198
                                                                                                                                                                                                                     RESULT 13
                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (G-CSF) and granulocyte macrophage-colony stimulating factor (GM-CSF). The linker regions used are represented by AR87726 and AAR87730. This sequence was used in conjunction with AAT88200 to amplify codons 39-127 of IL-2 for use in a modified ligand. These modified ligands are known as circularly permuted ligands. The modified ligands can be joined to another protein (preferrably a cytotoxin or an antibody) using a spacer (see AAR87732-R87734). The circularly permuted ligands have greater specificity and binding affinity than the original ligand. They can be used in chimeric molecules to inhibit the growth of tumour cells in vivo, where the two copies of the protein sequence are joined to cytotoxins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Circularly permuted ligands and chimeric mols. are modified interleukin(s) or colony-stimulating factors - with increa binding specificity and affinity for inhibiting tumours
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Linker; interleukin-4; interleukin-2; IL-4; IL-2; G-CSF; GM-CSF; granulocyte-colony stimulating factor; circularly permuted ligand; cancer; therapy; granulocyte_macrophage-colony stimulating factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAT08176-T08219 represent amplification primers used of modified ligands. The modified ligands comprise t
                                                                                                                                                                             AAT08198 standard; DNA;
Linker; interleukin-4; interleukin-2; IL-4; IL-2; G-CSF; GM-CSF;
                                          Amplification primer BK135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 5; Page 35; 97pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (USSH ) US DEPT HEALTH & HUMAN SERVICES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Amplification primer BK138
                                                                                         28-MAY-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sequence joined to a linker. The sequences used in the ligand in interleukin-4 (IL-4), IL-2, granulocyte-colony stimulating factor
                                                                                                                                                                                                                                                                                    26
                                                                                                                                                                                                                                                                                                                             2 TCATCCTGGGTAAGAGTGGGACACCT 27
                                                                                                                                                                                                                                                                                                                                                                          . Similarity
19; Conserv
                                                                                                                                                                                                                                                                                    TCACCGGAGGTAACGGTGGGGCACCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              94US-0225224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95WO-US04468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                reaction;
                                                                                                                                                                                                                                                                                                                                                                                            49.3%;
73.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           10 C; 12 G; 10 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The modified ligands comprise two copies of a linker. The sequences used in the ligand include
                                                                                                                                                                             42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              English.
                                                                                                                                                                             ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PCR; primer; amplify; ss.
                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                         Score 14.8;
Pred. No. 3
                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                         3e+03;
                                                                                                                                                                                                                                                                                                                                                                                                              DB 16;
                                                                                                                                                                                                                                                                                                                                                                     7;
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                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           increased
                                                                                                                                                                                                                                                                                                                                                                                                                39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      construction
                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                     0
  PD XXX
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AAH76860/c
                                                                                                                                                                                                                                                                                                                                          RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S
Matches 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             of modified ligands. The modified ligands comprise two copies of a sequence joined to a linker. The sequences used in the ligand include interleukin-4 (IL-4), IL-2, granulocyte-colony stimulating factor (G-CSF) and granulocyte macrophage-colony stimulating factor (G-CSF). The linker regions used are represented by AAR87726 and AAR87730. This sequence was used in conjunction with AA708199 to amplify a codons 1-38 of IL-2 for use in a modified ligand. These modified ligands are known as circularly permuted ligands. The modified ligands can be joined to another protein (preferrably a cytotoxin or an antibody) using a spacer (see AAR87732-R87734). The circularly permuted ligands have greater specificity and binding affinity than the original ligand. They can be used in chimeric molecules to inhibit the growth of tumour cells in vivo, where the two copies of the protein sequence are joined to cytotoxins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     granulocyte-colony stimulating factor; circularly permuted cancer; therapy; granulocyte macrophage-colony stimulating polymerase chain reaction; PCR; primer; amplify; ss.
WO200171001-A1
                                                                      human immunodeficiency virus; immune disorder; inflammatory cytostatic; anti-HIV; antiinflammatory; immunomodulator; reverse transcription-PCR; RT-PCR primer; ss.
                                                                                                                               Human; tyrosinase 15; recombinant production;
malignant tumour; cancer; blood disease; HIV infection;
                                                                                                                                                                                                                           14-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAT08176-T08219 represent amplification primers used in the cor
of modified ligands. The modified ligands comprise two copies
sequence joined to a linker. The sequences used in the ligand
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Circularly permuted ligands and chimeric mols. are modified interleukin(s) or colony-stimulating factors - with increased binding specificity and affinity for inhibiting tumours
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-APR-1994;
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                                     Homo sapiens
                                                                                                                                                                                     Human
                                                                                                                                                                                                                                                                                                   AAH76860 standard; DNA; 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1995-366354/47
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (USSH ) US DEPT HEALTH & HUMAN SERVICES
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                                                                                                                                                                                     tyrosinase
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         l Similarity
19; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5; Page 35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                  TCATCCTGGGTAAGAGTGGGACACCT 27
                                                                                                                                                                                                                                                                                                                                                                                               TCACCGGAGGTAACGGTGGGGCACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP; 10 A; 12 C;
                                                                                                                                                                                                                         (first entry)
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                                                                                                                                                                                   15 RT-PCR primer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         49.3%;
73.1%;
                                                                                                                                                                                                                                                                                                     ВP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 14.8; DB 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                   SEQ
                                                                                                                                                                                     IJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.1e+03
                                                                                                                                                                                     NO:4.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            42;
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factor;
                                                                                                             condition;
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RESULT 15
AAA88764
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to human tyrosinase 15 (AAG66766), nucleic acids encoding it (AAH76858), and a method for the recombinant production of tyrosinase 15. The protein has a molecular weight of 15 kb. The present invention additionally discloses an antagonist of tyrosinase 15 for therapeutic use, and an antibody which specifically binds to tyrosinase 15. Tyrosinase 15, and nucleotides which encode it may be used for treating a variety of diseases, such as malignant tumours, blood diseases, HIV (human immunodeficiency virus) infection, immune disorders and inflammatory conditions. The protein may also be used to screen for modulators of its activity or for peptide fingerprinting identification. The polynucleotide can be used as a primer for nucleic acid amplification reactions or as a probe for hybridisation reactions, or in producing gene chips or microarrays. Sequences AAH76859-AAH7680 represent reverse transcription-PCR (RT-PCR) primers used in an exemplification of the
                                                                                                                                                                                                                                        Key
5'UTR
19-OCT-2000.
                                                                                                                                                                     CDS
                                                                                                                                                                                                                                                                                                              Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19-FEB-2001
                                               WO200061611-A2
                                                                                                                                                                                                                                                                                                                                                                                                           RSV; vaccine; attenuation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Respiratory syncytial virus NS1-NS2 gene fusion region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAA88764 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human tyrosinase 15 and encoded polynucleotide, used in diagnosis and treatment of malignant tumors, hemopathy, human immunodeficiency virus infection, immunological diseases and inflammation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19-MAR-2001;
                                                                                                                                                                                                                                                                                                                                  Human respiratory syncytial virus
                                                                                                                                                                                                                                                                                                                                                                                    NS2 gene; mutant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Мао
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    invention to isolate human tyrosinase 15 cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6 CCTGGGTAAGAGTGGGACACC 26
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17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTGGGTGACAGTGCGAGACC 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP; 3 A; 9 C; 8 G; 4 T;
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/note= "
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81.0%;
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                                                                                       end of NS2 open reading
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                                                                                                                                                                                                                                                                                                                                                                                                        pneumonia; bronchiolitis; NS1 gene;
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Pred. No. 3
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Search completed: June 21, Job time : 167.531 secs

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TCCTTGGTTAGAGATGGACAC

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QY
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Best Local :
                                                                                                                                                                                                                                                                                                                                                      The present sequence represents a fusion of human respiratory syncythal virus (RSV) NSI gene 5' nontranslated region to the NS2 coding region. PCR-mediated mutagenesis (see AAA88760-61) was used to delete the NSI gene coding region, 3' untranslated region, the NSI-NS2 coding region and the NS2 5' nontranslated region, a cotal of 529 nucleotides. The deleted region corresponds to nucleotides 99-627 of the RSV antigenome cDNA given in AAA88743. This type of deletion can be incorporated into viable recombinant RSV of the invention to yield an altered phenotype, in this case reduced rate of virus growth and reduced plaque size in vitro. The invention relates to infectious chimeric RSV produced by introducing 1 or more heterologous gene(s) or gene segment(s) from 1 RSV subgroup or strain into a recipient RSV produced of a different subgroup or strain into a recipient RSV produced of a different subgroup or strain into a recipient RSV produced by a different subgroup or strain into a recipient RSV produced by a different subgroup or strain whe resulting the produced by a different subgroup or strain whe resulting the produced by a different subgroup or strain whe resulting the produced by a different subgroup or strain whe resulting the produced by a different subgroup or strain whe resulting the produced by a different subgroup or strain into a recipient RSV produced by a different subgroup or strain and the produced by a different subgroup or strain into a recipient RSV produced by a different subgroup or strain the produced by a different subgroup or strain and the produced by a different subgroup or strain and the produced by a different subgroup or strain and the produced by a different subgroup or strain and the produced by a different subgroup or strain and the produced by a different subgroup or strain and the produced by a different subgroup or strain and the produced by a different subgroup or strain and the produced by a different subgroup orecommended by a different subgroup or strain and the produced by 
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                                                                                                                                                                                       Sequence 33
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Infectious chimeric respiratory syncytial virus (RSV) produced from cloned nucleotide sequences, useful as a vaccine against diseases caused by the virus, such as pneumonia and bronchiolitis -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Collins PL,
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                                                                                                                                                                                                                                                                                                                                          subgroup or strain.
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                                                                                                                                                                                                                                                                                  rticle is
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                                                                 l Similarity
17; Conserv
                                                                                                                                                                                                                                               RSV, which causes pneumonia and bronchiolitis in infants
      TCCTGGGTAAGAGTGGGACAC 25
                                                                                                                                                                                       BP;
                                                                                                                                                                                                                                                                        strain. The resulting chimeric RSV virus or subviral infectious and attenuated, preferably by introduction mutations. The chimeric RSV is useful as a vaccine
                                                                    Conservative
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81.0%;
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); Mismatches
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Post-processing: Minimum Match
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       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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2: /cgn2_6/ptodata/1,
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30
1 TTCATCCTGGGTAAGAGTGGGACACCTGTG
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/cgn2_6/ptodata/1/ina/6A_COMB.seq:*
/cgn2_6/ptodata/1/ina/6B_COMB.seq:*
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US-09-171-425-7
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Query Match Best Local S Matches 20

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Similarity 74.1 20; Conservative

52.7%; 74.1%;

Score 15.8; Pred. No. 93; Mismatches

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| CLASSIFICATION: 514 ATTORNEY/AGENT INFORMATION: NAME: Ludwig, Steven R. REGISTRATION UNBER: 36,203 REFERENCE/DOCKET NUMBER: 06 TELECOMMUNICATION INFORMATION: TELEPHONE: (202) 371-2600 TELEPHONE: (202) 371-2640 TELEPHONE: (202) 371-2540 INFORMATION FOR SEQ ID NO: 63: SEQUENCE CHARACTERISTICS: LENGTH: 31 base pairs TYPE: nucleic acid STRANDEDNESS: both TOPOLOGY: both TOPOLOGY: both   | 557C-63/c 63, Appl 0. 583067 INFORMATE WAR CANT: WAR OF INVEN R OF SEQU SEPONDENCE EET: 110 TE: DASH ITE: U. NTRY: U. NTRY: U. NTRY: U. PUTER: I.  | 13.4 44.7<br>13.4 44.7<br>13.4 44.7<br>13.4 44.7<br>13.2 44.0<br>13.2 44.0<br>13.2 44.0<br>13.2 44.0<br>13.2 44.0<br>13.2 44.0<br>13.2 44.0<br>13.2 44.0<br>13.2 44.0<br>13.2 44.0<br>13.3 43.3<br>13.4 43.3<br>13.5 44.0<br>13.5 44.0<br>13.6 44.0<br>13.7 44.0<br>13.8 43.3<br>13.8 43.3<br>13.9 44.0  |
| N: 514 N: | on US/0845457C  on te, Suzanne  Jack R.  Neural Thread Protein  of Alzheimer's Disease  121  Jack R.  121  SSS:  207  Kessler, Goldstein &  York Avenue, Suite 600  PO-DOS/MS-DOS  PC-DOS/MS-DOS  PC-DOS/MS-DOS  PC-DOS/MS-DOS  ANY-1945   | 50 1 US-08-171-389-326 50 1 US-08-123-936-326 50 2 US-08-475-228A-326 50 3 US-08-482-080A-326 50 4 US-09-354-947-326 50 5 PCT-US93-12286-326 6 1 US-08-882-046-61 7 US-08-621-914A-13 7 US-08-621-914A-13 7 US-08-642-27 7 US-08-642-27 7 US-08-640-658-33 7 US-08-469-658-33 7 US-08-469-658-33 7 US-08-469-658-33 7 US-08-761-243C-25 7 US-08-761-243C-25  |
|  | Gene Expression and Detection Fox P.L.L.C.   | Sequence 326, App Sequence 327, App Sequence 327, App Patent No. 525642 Patent No. 5472939 Sequence 33, App Sequence 23, App Sequence 23, App Sequence 25, App Sequence 2 |

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Best Local Similarity
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Patent No. 5948634
                                                                                                                                                                                                                                                                                                                  Patent No.
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APPLICANT: de la Monte,
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        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentln Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                              APPLICANT: de la Monte, S
APPLICANT: Wands, Jack R.
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                   TITLE OF INVENTION:
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TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
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APPLICANT: Wands, Jack R.
                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
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CTTY: Washington
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TOPOLOGY: bo
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                                                                                                               COUNTRY:
                                                                                                                                  STATE:
                                                                                                                                                                 STREET:
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                                                                                                                                                              E: Sterne, Kessler, Goldstein & Fox P.L.L.C
1100 New York Avenue, Suite 600
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                                                                                                                                                                                                                                 Neural Thread Protein Gene Expression and Detection of Alzheimer's Disease
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74.18;
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Pred. No. 93;
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PCT-US95-17111A-63/c
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              Query Match
Best Local Similarity
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                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 31 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/:
FILING DATE: 14-NOV-1994
                                                                                                                                                                                   TELEPHONE: (202) 371-2600
                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION DATA: APPLICATION NUMBER: PC
                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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CORRESPONDENCE ADDRESS:
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APPLICANT: Wands, Jack R.
                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: Neural Thread Protein Gene Expression and TITLE OF INVENTION: Detection of Alzheimer's Disease
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                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentTn Policy
                                                                                                                                                                       TELEFAX:
                                                                                                                                                                                                                 NAME: Ludwig, Steven R. REGISTRATION NUMBER: 36, REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                               FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: U.S:A. ZIP: 20005-3934
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Conservative
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74.1%;
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            Score 15.8;
Pred. No. 93;
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Pred. No. 9:
Mismatches
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US-08-225-224-31
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GENERAL INFORMATION:
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                                                                                                                                    APPLICANT: Pastan, Ira
APPLICANT: Kreitman, Robert J.
APPLICANT: Puri, Raj K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
LENGTH: 39 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
NAME: Weber, Ellen L.
REGISTRATION NUMBER: 32,762
REFERENCE/DOCKET NUMBER: 15:
TELECOMMUNICATION INFORMATION:
                                                                                    TITLE OF INVENTION: Circularly Permuted Ligands and TITLE OF INVENTION: Circularly Permuted Chimeric Molecules NUMBER OF SEQUENCES: 72
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPUTER:
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: PASTAN, ITA
APPLICANT: KREITMAN, R
TITLE OF INVENTION: CI
TITLE OF INVENTION: CI
                                                                    CORRESPONDENCE ADDRESS:
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STATE:
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FILING DATE: 8-APR-1994
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                                                   ADDRESSEE:
                                                                                                                                                                                                                31, Application US/08722258
5. 6011002
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5. 5635599
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San Francisco
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                                 E: Townsend and Townsend and Crew LLP Two Embarcadero Center, Eighth Floor
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Steuart Street Tower, One Market Plaza
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(415) 543-5043
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73.1%;
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Pred. No. 2
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/
FILING DATE: 08-APR-1994
ATTORNEY/AGENT INFORMATION:
NAME: Weber, Ellen L.
REGISTRATION NUMBER: 32,76
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NAME: Weber, Ellen Lauver
NAME: Weber, Ellen Lauver
NAME: Weber, Ellen Lauver
            REFERENCE/DOCKET NUMBER: 15
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 543-9600
                                                                                                                                                                                                                           SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION:
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APPLICATION NUMBER: WO PCT/US95/04468
FILING DATE: 06-APR-1995
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MEDIUM TYPE: Floppy disk
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MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                        APPLICATION NUMBER: PCT/
FILING DATE: 07-APR-1995
                                                                                                                                                                                                                                                            COMPUTER: IBM PC OPERATING SYSTEM:
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73.18;
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                                                                32,762
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RESULT 9
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Sequence 28; Application US/08722258 Patent No. 6011002
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Best Local :
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Best Local Similarity
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NAME: Weber, Ellen L.
REGISTRATION NUMBER: 32,762
REFERENCE/DOCKET NUMBER: 1528
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 543-9600
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compati
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
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T: Steuart Street Tower, One Market Plaza
San Francisco
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5635599
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EDNESS: single
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nucleic acid
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CIRCULARLY PERMUTATED LIGANDS AND
CIRCULARLY PERMUTED FUSION PROTEINS
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Pred. No. 2
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Pred. No. 2.9e+02;
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Best Local :
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                                                                                                                   TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
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APPLICATION NUMBER: US 08/225,224
FILING DATE: 08-APR-1994
ATTORNEY/AGENT INFORMATION:
NAME: Weber, Ellen Lauver
                SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                             APPLICANT:
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PRIOR APPLICATION NUMBER: WO PCT/US95/04468
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CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
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APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS:
TOPOLOGY: li
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/0 FILING DATE: 08-JAN-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OPERATING SYSTEM:
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19; Conserv
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nucleic acid
DEDNESS: single
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Puri, Raj K.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (415) 576-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      576-0300
                                                                                                                      CIRCULARLY PERMUTATED LIGANDS AND CIRCULARLY PERMUTED FUSION PROTEINS: 59
                                                                                                                                                                                                                                                                                                                                                                                    49.3%;
73.1%;
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PCT/US95/04468
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                                                                                                                                                                                                                                                                                                                                                                                    Score 14.8;
Pred. No. 2.
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                                Version #1.30
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ZIP: 94025-7022
ZIP: 94025-7022
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
TNG SYSTEM: PC-DOS/MS-DOS
TNG SYSTEM: PC-DOS/MS-DOS
TNG SYSTEM: PC-DOS/MS-DOS
TNTIN Release #1.0, Version #1.30
                 TELLERAX: (413)
INFORMATION FOR SEQ ID NO: ?
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
LENGTH: 45 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 38, Application Patent No. 6030835 GENERAL INFORMATION:
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Best Local :
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 42 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Musser M.D., James M.
APPLICANT: Kapur M.D., Vivek
TITLE OF INVENTION: Methods and Compositions for Identifying
TITLE OF INVENTION: Group A Streptococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: 15
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 543-9600
                                                                                                       REFERENCE/DOCKET NUMBER: BA
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 926-6200
                                                                                                                                                        FILING DATE: 02-DEC-1993
ATTORNEY/AGENT INFORMATION:
NAME: Rae-Venter Ph.D., Barbara
REGISTRATION NUMBER: 32,750
                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
FILING DATE: 14-SEP-1994
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ATTORNEY/AGENT INFORMATION:
NAME: Weber, Ellen L.
REGISTRATION NUMBER: 32,7
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                                                                                                                                                                                                                   APPLICATION NUMBER: US 08/160,965 FILING DATE: 02-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: Menlo Park
STATE: CA
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CLASSIFICATION:
STRANDEDNESS:
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o. 6030835
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               nucleic acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    E: WEIL, GOTSHAL & MANGES 2882 Sand Hill Road, Suite 280
                                                                                       (415) 854-3713
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Pred. No. 2.9e+02;
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US-08-931-220-38
Query Match
Best Local Similarity
"hehes 20; Conserva
                                                                      ; IMMEDIATE SOURCE: ; CLONE: speB19 PCT-US95-11723-38
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC COMPATION OPERATING SYSTEM: PC-DC SOFTWARE: PATENTIN ReleCURRENT APPLICATION DATA:
                                                                                                                             ANTI-SENSE: NO ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                               FILING DATE: 14-SEP-1994
ATTORNEY/AGENT INFORMATION:
NAME: Rac-Venter Ph.D., Barbara
REGISTRATION NUMBER: 32,750
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                                                                                                                                                        HYPOTHETICAL:
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                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: BAYL-004/03US TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER:
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                                                                                                                 ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: FILING DATE: 14-SEE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: P.O. Bo:
CITY: Palo Alto
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                                                                                                                                                                                                                               LENGTH:
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                                                                                                                                                                                                             : 45 base pairs nucleic acid
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                                                                                                                                                                                                                                                                         (415) 424-8760
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              Conservative
                                                                                                              Streptococcus pyogenes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
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14-SEP-1995
                                                                                                                                                                       DNA (genomic)
                                                                                                                                                                                                    single
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69.0%;
                          48.7%;
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Identifying Streptococcus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
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                          Score 14.6; DB 5;
Pred. No. 3.7e+02;
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              Mismatches
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                                      Length 45;
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TCATGTTGGGGAAGGGCGGGAACACTTTG

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PCT-US96-05997-38/c

Sequence 38, Applicat GENERAL INFORMATION:

Application PC/TUS9605997

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RESULT 14
US-09-742-703-12
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Sequence 12, Application US/09742703 Patent No. 6423543
                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (415) 854-37
NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 45 base pairs
TYPE: nucleic acid
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                      IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                    ORIGINAL SOURCE:
ORGANISM: Streptococcus pyogenes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 11-SEP-PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: BATTELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 0 FILING DATE: 02-DEC-1993 ATTORNEY/AGENT INFORMATION:
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ANTI-SENSE: 1
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE: 01-MA
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                                                                                        TCATGTTGGGGAAGGGCGGGAACACTTTG
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                                                                                                                                                                                                                                                                                                                                                                                                                        (415)
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                                                                                                                                                   Conservative
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                                                                                                                                                               Score 14.6; DB 5;
Pred. No. 3.7e+02;
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Search completed: June 22, 2003, 00:01:29 Job time: 38.625 secs
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SEQ ID NO 12
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
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US-09-171-425-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; OTHER INFORMATION: Antisense Oligonucleotide US-09-742-703-12
                                                                                                                                                                                                              US-09-171-425-2
                                                                                                                                                                                                                                                                                            SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 2
LENGTH: 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: Patrick Allen |
APPLICANT: Lex M. Cowsert
TITLE OF INVENTION: ANTIS
FILE REFERENCE: RTS-0090
                                                                                                                                                                        Query Match
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Best Local Similarity
Matches 16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Schorr, Joacnim APPLICANT: Baker, Henry J. APPLICANT: Smith, Bruce F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/742,703 CURRENT FILING DATE: 2000-12-20
                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/171,425A CURRENT EILING DATE: 1998-10-19 EARLIER APPLICATION NUMBER: PCT/EP97/01943 EARLIER FILING DATE: 1996-04-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: NUCLEIC ACID VACCINATION FOR PARVOVIRAL INFECTIONS
                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                    FILE REFERENCE: 08909/003001
                                                                                                                                                                                                                                            ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                            OTHER INFORMATION: Synthetically generated oligonucleotides
                                                                                                                                                                                                                                                                               TYPE: DNA
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1: /cgn2_6/ptodata/2/pubpna/US07_PUBCOMB.seq:*

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| 45                    | 44                  | 43                  | 42                | 41                | 40                | 39                  | 38                | 37                    | 36                    | ဌဌ                   | 34                   | 33                    | 32                   | 31                  | 30                  | 29                  | 28                  | 27                  | 26                  | 25                | 24                | 23                   | 22                   | 21                | 20                |
| 13.2                  | 13.2                | 13.2                | 13.4              | 13.4              | 13.4              | 13.4                | 13.4              | 13.4                  | 13.4                  | 13.4                 | 13.4                 | 13.6                  | 13.6                 | 13.6                | 13.6                | 13.6                | 13.6                | 13.6                | 13.6                | 13.8              | 14                | 14                   | 14                   | 14.2              | 14.2              |
| 44.0                  | 44.0                | 44.0                | 44.7              | 44.7              | 44.7              | 44.7                | 44.7              | 44.7                  | 44.7                  | 44.7                 | 44.7                 | 45.3                  | 45.3                 | 45.3                | 45.3                | 45.3                | 45.3                | 45.3                | 45.3                | 46.0              | 46.7              | 46.7                 |                      | 47.3              |                   |
| 25                    | 25                  | 25                  | 40                | 40                | 40                | 31                  | 30                | 25                    | 25                    | 25                   | 25                   | 25                    | 25                   | 25                  | 25                  | 25                  | 25                  | 25                  | 25                  | 31                | 31                | 25                   | 25                   | 39                | 39                |
| 9                     | 9                   | 9                   | 10                | 10                | φ                 | 9                   | 9                 | 9                     | 9                     | 9                    | 9                    | 9                     | 9                    | 9                   | 9                   | 9                   | 9                   | 9                   | 9                   | 10                | 9                 | 9                    | 9                    | 9                 | 9                 |
| US-10-098-263B-19558  | US-10-060-895A-1149 | US-10-060-895A-1148 | US-09-922-101-60  | US-09-951-401-60  | US-09-951-402-60  | US-09-864-636A-2477 | US-10-082-772-9   | US-10-098-263B-125737 | US-10-098-263B-103293 | US-10-098-263B-26737 | US-10-098-263B-26559 | US-10-098-263B-103720 | US-10-098-263B-31788 | US-10-060-895A-1147 | US-10-060-895A-1146 | US-10-060-895A-1145 | US-10-060-895A-1144 | US-10-060-895A-1143 | US-10-060-895A-1142 | US-09-801-274-873 | US-09-912-263-86  | US-10-098-263B-65995 | US-10-098-263B-44679 | US-10-012-070A-9  | US-10-012-013-9   |
| <br>Sequence 19558, A |                     | Sequence 1148, Ap   | Sequence 60, Appl | Sequence 60, Appl | Sequence 60, Appl | Sequence 2477, Ap   | Sequence 9, Appli |                       | Sequence 103293,      |                      | Sequence 26559, A    | Sequence 103720,      | 31788,               | Sequence 1147, Ap   | 1146,               | 1145,               | 1144,               | •                   | Sequence 1142, Ap   | Sequence 873, App | Sequence 86, Appl | Sequence 65995, A    | Sequence 44679, A    | Sequence 9, Appli | Sequence 9, Appli |

## ALIGNMENTS

RESULT 1 US-09-964-667-9

Sequence 9, Application US/09964667 Publication No. US20030033621A1 GENERAL INFORMATION:

APPLICANT: de la Monte, Suzanne Wands, Jack R.

TITLE OF INVENTION: Transgenic Animals and Cell Lines for Screening Drugs Effective for the Treatment or Preventio

Screening Drugs Effect of Alzheimer's Disease

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INFORMATION FOR SEQ ID NO: 9:
                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 30 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                FILING DATE: 28-Sep-2001 CLASSIFICATION: <Unknown> ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                            ZIP: 20005-3934
COMPUTER READABLE FORM:
COMPUTER: READABLE FORM:
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION NUMBER: US/09/964,667
TOPOLOGY: linear
MOLECULE TYPE: cDNA
SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 14 CORRESPONDENCE ADDRESS:
                                                                                                                                                                           TELEPHONE: 202-371-2540
                                                                                                                                                                                                                                                                      NAME: Esmond, Robert W. REGISTRATION NUMBER: 32,893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE: DC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: Sterne, Kessler, Goldstein STREET: 1100 New York Ave., Suite 600
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of Alzheimer's Disease

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RESULT 3
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                                                                      Sequence 9, Application US/09964412
Patent No. US20020129391A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 9, Application US/09964666
Patent No. US20020104108A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                             Matches
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Best Local
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TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO: 9:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
CORRESPONDENCE Sterne, Kessler, Goldstein & Fox, P.L.L.C.
ADDRESSEE: Sterne, Kessler, Goldstein & Fox, P.L.L.C.
STREET: 1100 New York Ave., Suite 600
TITLE OF INVENTION: Transgenic Animals and Cell Lines for Screening Drugs Effective for the Treatment or Prevention
                                      APPLICANT: de la Monte, Suzanne
Wands, Jack R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Transgenic Animals and Cell Lines for Screening Drugs Effective for the Treatment or Prevention
                                                                                                                                                                                                                                                                                                                                                                SEQUENCE DESCRIPTION: SEQ ID NO: 9:
                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear MOLECULE TYPE: cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/09/964,666
FILING DATE: 28-Sep-2001
CLASSIFFICATION: <UDKnown>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
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Wands, Jack R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Esmond, Robert W. REGISTRATION NUMBER: 32,893 REFERENCE/DOCKET NUMBER: 06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ZIP: 20005-3934
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Conservative (
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Pred. No. 0.00015;
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Pred. No. 0.00015;
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RESULT 4
US-09-964-667-5/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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RECISTRATION NUMBER: 32,893
REFERENCE/DOCKET NUMBER: 06
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
TELEFAX: 202-371-2540
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COMPUTER READABLE FORM:
COMPUTER: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
APPLICATION NUMBER: US/09/964,667
FILING DATE: 28-Sep-2001
CLASSIFICATION: duknown>
ATTORNEY/AGENT INFORMATION:
                                                                             COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS: ADDRESSEE: Sterne,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION: <Unknown> ATTORNEY/AGENT INFORMATION:
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ADDRESSEE: Sterne, Kessler,
STREET: 1100 New York Ave.,
                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES: 14
                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: Transgenic Animals and Cell Lines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
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ilarity 100.0%;
Conservative (
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00 New York Ave., Suite 600
                                                                                                                                                                                                                                                                                                                                                           Screening Drugs Effective for the Treatment or Preventio of Alzheimer's Disease
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Pred. No. 0.00015;
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TOPOLOGY: linear

MOLECULE TYPE: cDNA
SEQUENCE DESCRIPTION: SEQ ID NO: 5:
US-09-964-667-5
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US-09-964-666-5/c
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                                  Matches
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Best Local S
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Best Local Similarity
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MEDIUM TYPE: Floppy disk
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ADDRESSEE: Sterne, Kessler, Goldstein & Fox, P.L.L.C STREET: 1100 New York Ave., Suite 600
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Wands, Jack R.
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REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                  NAME: ESMOND, ROBERT W.
REGISTRATION NUMBER: 32,893
REFERENCE/DOCKET NUMBER: 0609.4370000
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
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                                                                                                                                   MOLECULE TYPE:
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1 Similarity 100.0%;
22; Conservative (
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3 CATCCTGGGTAAGAGTGGGACA 24
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                                                                                                                                                                                TYPE: nucleic acid
                                                                                                                                                                                                                                                    TELEFAX: 202-371-2540
                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/09/964,666 FILING DATE: 28-Sep-2001
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STRANDEDNESS: single
                                                                                                                                               TOPOLOGY: linear
                                                                                                                                                                 STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: <Unknown>
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ilarity 100.0%;
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                               ; Score 22; DB
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0; Mismatches
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Pred. No.
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                                                DB 10; Length 22; 0.74;
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0.74;
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; SEQUENCE DESCRIPTION: SEQ ID NO: US-09-964-412-5
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US-09-964-412-5/c
                                                                                                                                                                                                                                                                                                   US-10-098-263B-65996
CURRENT APPLICATION NUMBER: US/10/098,263B
CURRENT FILING DATE: 2003-01-08
PRIOR APPLICATION NUMBER: 60/276,759
PRIOR FILING DATE: 2001-03-16
NUMBER OF SEO ID NOS: 131066
SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
SEO ID NO 65996
LENGTH: 25
                                                                                                                                                                                                                                 Sequence 65996, Application US/10098263B Publication No. US20030104410A1 GENERAL INFORMATION:
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Best Local 9
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                                                                                                                                                                      APPLICANT: Mittman, Michael TITLE OF INVENTION: Human Microarray FILE REFERENCE: 3118.1
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SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Esmond, Robert W.
REGISTRATION NUMBER: 32,893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/964,412
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein & Fox, P.L.L.C.
STREET: 1100 New York Ave., Suite 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: de la Monte, S
Wands, Jack R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 14
                                                                                                                                                                                                                                                                                                                                                                                22 CATCCTGGGTAAGAGTGGGACA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3 CATCCTGGGTAAGAGTGGGACA 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE: 202-371-260
TELEFAX: 202-371-2540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 28-Sep-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ZIP: 20005-3934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: Washington
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
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US-10-098-263B-65996

TYPE: DNA
ORGANISM: Homo sapien

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                                                                                                                         US-09-802-640-9
                                                  Query Match
Best Local S
Matches 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US/09/539,697
PRIOR FILING DATE: EARLIER FILING DATE: 2000-03-31
NUMBER OF SEQ ID NOS: 68
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 27
LENGTH: 45
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 9, Application US/09802640 Publication No. US20030036057A1 GENERAL INFORMATION:
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Matches
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Best Local (
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                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/802,640
CURRENT FILING DATE: 2001-03-09
NUMBER OF SEQ ID NOS: 122
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TITLE OF INVENTION: ESSENTIAL GENES IN YEAST AS TARGETS FOR ANTIFUNGAL
TITLE OF INVENTION: AGENTS,
TITLE OF INVENTION: HERBICIDES, INSECTICIDES AND ANTI-PROLIFERATION DEFILE REFERENCE: ACA-8
                                                                                                                                                                                                                                                                                                             APPLICANT: KLEYN PALTICK
TITLE OF INVENTION: GENES AND POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: CARDIOVASCULAR DISEASE AND THEIR USE
FILE REFERENCE: 24736-2048
                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Braun, Andreas
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                                                                                                                                                       TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                       OTHER INFORMATION: PCR primer
                                                  Local Similarity
les 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
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8 TGGGTAAGAGTGGGACACCTGTG 30
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                                                    Conservative
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                                                                  50.0%;
78.3%;
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81.8%;
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                                               Score 15; DB y; Lc. Pred. No. 1.3e+03;
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Pred. No. 6.9e+02;
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Pred. No. 1.
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                                                                                   Length 43;
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                                                  Indels
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RESULT 12

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; ORGANISM: Homo sapiens
US-09-801-274-8
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US-10-085-906-97
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Best Local S
Matches 19
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                                                                            Query Match
Best Local Similarity
Matches 19; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 8, Application US/09801274 Patent No. US20020032319A1
                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Cargill, Michele
APPLICANT: Ireland, James S.
APPLICANT: Lander, Eric S.
TITLE OF INVENTION: HUMAN SINGLE NUCLEOTIDE POLYMORPHISMS FILE REPERENCE: 2825, 2009-001
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: US/09/801,274
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: US/09/187,510
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                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 2000-05-22
NUMBER OF SEQ ID NOS: 1802
                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 2000-03-07 PRIOR APPLICATION NUMBER: US 60/206,129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: US 60/126,215
PRIOR FILING DATE: 1999-03-25
PRIOR APPLICATION NUMBER: US 09/534,061
PRIOR FILING DATE: 2000-03-24
PRIOR APPLICATION NUMBER: PCT/US00/07938
PRIOR FILING DATE: 2000-03-24
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TITLE OF INVENTION: POLYMORPHIC ELEMENTS IN THE
TITLE OF INVENTION: COSTIMULATORY RECEPTOR LOCUS AND USES THEREOF
FILE REFERENCE: GNN-5343CP2
CURRENT APPLICATION NUMBER: US/10/085,906
CURRENT FILING DATE: 2002-02-27
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                                                                                                                                                                                                                 LENGTH: 31
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                                     3 CATCCTGGGTAAGAGTGGGACACCTGTG 30
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CATCAAGGGATGAARTGTGACACCTGCG 29
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73.1%;
                                                                                               49.3%;
67.9%;
                                                                          Score 14.8; DB 10
Pred. No. 1.6e+03;
1; Mismatches
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Pred. No. 1.6e+03;
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                                                                                                                    DB 10;
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US-10-098-263B-97774/c
: Sequence 97774, Application US/10098263B
: Publication No. US20030104410A1
; GENERAL INFORMATION:
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                                                                                                                                                                                                                                                           RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; OTHER INFORMATION: Synthetic Oligonucleotide US-10-215-112-12152
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Best Local S
Matches 17
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CURRENT FILING DATE: 2002-08-08
NUMBER OF SEQ ID NOS: 14936
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 7585.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 12152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 12152, Application US/10215112 Publication No. US20030082596A1 GENERAL INFORMATION:
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APPLICANT: Michael Mittmann
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Best Local S
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                                  APPLICANT: Mittman, Michael
TITLE OF INVENTION: Human Microarray
ETLE REFERENCE: 3118.1
CURRENT APPLICATION NUMBER: US/10/098,263B
CURRENT FILING DATE: 2003-01-08
-PRIOR APPLICATION NUMBER: 60/276,759
PRIOR FILING DATE: 2001-03-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILE REFERENCE: 3119
CURRENT APPLICATION NUMBER: US/10/215,112
CURRENT FILING DATE: 2002-08-08
NUMBER OF SEO ID NOS: 14936
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                    NUMBER OF SEQ ID NOS: 131066
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
OFTWARE: Microarray Probe Sequence Listing Generator V 1.1
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17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                            17; Conservative
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81.0%;
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Pred. No. 2e+03;
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Search completed: June 22, 2003, 03:18:14 Job time: 96.5938 secs

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Query Match
Best Local Similarity
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Db
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                                                                                                          ; TYPE: DNA; Homo sapien US-10-098-263B-129375
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; TYPE: DNA
; ORGANISM: Homo sapien
US-10-098-263B-97774
                                                                                                                                                                                                                                                                                                                                             RESULT 15
US-10-098-263B-129375/c
                                                                                                                                                  SEQ ID NO 129375
LENGTH: 25
                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 97774
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Best Local :
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                                                                                                                                                                           NUMBER OF SEQ ID NOS: 131066
SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/098,263B
CURRENT FILING DATE: 2003-01-08
PRIOR APPLICATION NUMBER: 60/276,759
                                                                                                                                                                                                                                                              APPLICANT: Mittman, Michael TITLE OF INVENTION: Human Microarray FILE REFERENCE: 3118.1
                                                                                                                                                                                                         PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH:
25 TCCTGGGTCGGAGTGTCACAC 5
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

|                    | C                 |                    | C                 | c                 | Ω                 | ; _             | Result |   |
|--------------------|-------------------|--------------------|-------------------|-------------------|-------------------|-----------------|--------|---|
| 0                  | И                 | 4                  | ω                 | N                 | μ.                | No.             | 11t    |   |
| 15.4               | 16                | 16.2               | 16.4              | 16.4              | 16.6              | Score           |        |   |
| 15.4   51.3        | 53.3              | 54.0               | 54.7              | 54.7              | 55.3              | Match I         | Query  | æ |
| 46                 | 50                | 48                 | 50                | 50                | 48                | Match Length DB |        |   |
| 9                  | 9                 | 17                 | 9                 | 9                 | 14                | ; E             |        |   |
| 9 AI439612         | AU106864          | AZ796512           | AU106860          | AU102898          | н39590            | ID              |        |   |
| AI439612 tc91b01.x | AU106864 AU106864 | AZ796512 2M0052H18 | AU106860 AU106860 | AU102898 AU102898 | H39590 yp01g07.rl | Description     |        |   |

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| 45                     | 44                 | 43                | 42                 | 41                 | 40                 | 39                | 38                | 37                | 36                | <u>3</u> 5         | 34                 | 3                  | 32                | 31                  | 30                 | 29                 | 28                | 27                 | 26                | 25                | 24                | 23                 | 22                | 21                 | 20                 | 19                | 18                | 17                | 16                | 5                 | 14                 | Ľω                 | 12                | 11                | 10                 | 9             | ω.       | 7        |
| 13.2                   | 13.4               | 13.4              | 13.4               | 13.4               | 13.4               | 13.4              | 13.4              | ٠                 | 13.6              |                    |                    |                    |                   | ٠                   |                    |                    |                   |                    | ٠                 | •                 | 14                | ₩.                 |                   |                    | 14.2               |                   |                   | •                 |                   |                   |                    |                    | •                 |                   |                    | 14.8          | <b>ب</b> | 15.4     |
| 44.0                   | 44.7               | 4.                | 4.                 | 4.                 | 4.                 | 4.                | 4                 | 4.                | <u>ن</u>          | 5                  | S.                 | 5                  | <u>б</u>          | 6                   | 5.                 | 6.                 | 6                 | 6                  | σ.                | σ.                | 6.                | 5                  | 7.                | 7.                 | 7.                 | 7.                | œ                 | 8                 | 8                 | ω.                | ω.                 | ∞.                 | 9                 | 9                 | 9.                 | 49.3 .        | 0 !      | <u> </u> |
| 34                     | 50                 | 50                | 44                 | 40                 | 3<br>5             | 33                | 31                | 30                | 50                | 40                 | 37                 | 50                 | 49                | 49                  | 49                 | 49                 | 41                | 41                 | 39                | 30.               | 49                | 37                 | 50                | 49                 | 45                 | ა<br>5            | 50                | 50                | 42                | 40                | 46                 | 40                 | 50                | 48                | 40                 | <u>ა</u><br>თ | 47       | 50       |
|                        |                    |                   |                    |                    |                    |                   |                   |                   |                   |                    |                    |                    |                   |                     |                    |                    |                   |                    |                   |                   |                   |                    |                   |                    |                    |                   |                   |                   |                   |                   |                    |                    |                   |                   |                    | 14            |          |          |
| A1620509               | AZ373047           | AU104332          | AI494250           | AI900587           | AI801185           | N80349            | T78935            | H41620            | AU102621          | AA928240           | AA934082           | AZ576739           | D12406            | C20875              | C20874             | AA410762           | H14824            | AA976917           | н84235            | H39150            | D11989            | BI522018           | AU103750          | AI697225           | DR13B4T            | AV951566          | AU107906          | AU104029          | T96362            | H99413            | AA871520           | AI900587           | AU108052          | AU258691          | AZ575761           | N38850        | R08290   | AI024893 |
| <br>AI620509 tu56f04.x | AZ373047 1M0125J11 | AU104332 AU104332 | AI494250 qy98a01 x | AI900587 sc13c05.y | AI801185 to79h04.x | N80349 zal3cl2.rl | T78935 yd21f08.s1 | H41620 yo09b09.r1 | AU102621 AU102621 | AA928240 on87c07.s | AA934082 on27g11!s | AZ576739 AST-2T007 | D12406 HUM00TW129 | C20875 HUMGS000494. | C20874 HUMGS000494 | AA410762 zt35e11 r | H14824 ym25d07.s1 | AA976917 og35h04.s | H84235 ys65f06.s1 | H39150 yn83e09.r1 | D11989 HUM000S134 | в1522018 603081709 | AU103750 AU103750 | AI697225 tg17d08.x | AL737914 Danio rer | AV951566 AV951566 | AU107906 AU107906 | AU104029 AU104029 | T96362 Ve49c04.s1 | H99413 vx24f02.51 | AA871520 vq36e07 r | AI900587 sc13c05lv | AU108052 AU108052 | AU258691 AU258691 | AZ575761 AST-T32B0 | 7y80e         | f18e09.s | ou52b04  |

#### ALIGNMENTS

|  | TITLE<br>JOURNAL<br>COMMENT  | ORGANISM . REFERENCE AUTHORS   | ACCESSION<br>VERSION<br>KEYWORDS<br>SOURCE  | H39590/c<br>LOCUS<br>DEFINITION   |
|--|--|--|---|---|
| 4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108 Tel: 314 286 1800 Fax: 314 286 1810 Email: est@watson.wustl.edu Insert Size: 730 High quality sequence starts: 1 | Rifkin,L., Rohlfing,T., Soares,M., Tan,F., Trevaskis,E., Waterston,R., Williamson,A., Wohldmann,P. and Wilson,R. The WashU-Merck EST Project Unpublished (1995) Contact: Wilson RK | HOmo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  1 (bases 1 to 48) 1 (bases 1 to 48) 1 Hillier, L., Clark, N., Dubuque, T., Elliston, K., Hawkins, M., Holman M., Hultman, M., Kucaba, T., Le M., Lennon, G., Marra, M., Parsons, T. | IMAGE:186204 5' SIMILAR to 9b M87994 HUMALNE531 Human Carcinomal cell-derived Alu RNA transcript, (rRNA); gb:M81695 LEUKOCYTE ADHESION GLYCOPROTEIN P150,95 ALPHA CHAIN (HUMAN);, mRNA sequence. H39590 H39590.1 GI:915642 EST. | H39590<br>48 bp mRNA linear EST 16-AUG-1995<br>yp01g07.rl Soares breast 3NbHBst Homo sapiens cDNA clone |

FEATURES

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KEYWORDS
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                                                                              Suzuki, Y., Yoshitomo-Nakagawa, K., Maruyama, K., Suyama, A., S. Construction and characterization of a full length-e a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156
                                                                                                                                           Contact: Yutaka Suzuki
Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Jap
                                                                                                                                                                                                                                Diverse transcriptional initiation revealed by mapping of mRNA start sites EMBO Rep. 2 (5), 388-393 (2001).
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Source: IMAGE Consortium, LLNL
This clone is available royalty free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information.
Trace considered overall poor quality
Insert Length: 730 Std Error: 0.00
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                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae
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,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K., Sakaki
,Y., Nakamura,Y., Suyama,A. and Sugano,S.
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                                                                                                                               ysuzuki@ims.u-tokyo.ac.jp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of a modified pT7T3 vector (Pharmacia). Library went through one round of normalization to a Cot =
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/db_xref="taxon:9606"
                                                                  Location/Qualifiers
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               house mouse
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RESULT 2 SOCO

ORIGIN

FEATURES

COMMENT

JOURNAL MEDLINE TITLE REFERENCE

AUTHORS

VERSION ACCESSION

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49 TTCAGCCTGGGTGACAGAGAGAGACC
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostom
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 50)
Suzuki,Y. Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J.,
H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K., Sakt
Y., Nakamura,Y., Suyama,A. and Sugano,S.
Diverse transcriptional initiation revealed by fine, large-scal
mapping of mRNA start sites
EMBO Rep. 2 (5), 388-393 (2001)
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                                                                                                                                                                                                                     1 TTCATCCTGGGTAAGAGTGGGACACC 26
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COL03340, mRNA sequence
                                 2M0052H18F Mouse 10kb plasmid UUGC1Mclone UUGC2M0052H18 F, DNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and Sugano,S. Construction and characterization of a full length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Jap
Email: ysuzuki@ims.u-tokyo.ac.jp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 TTCATCCTGGGTAAGAGTGGGACACC
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20; Conservative
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                                                                                                                                                                                                                                                          Conservative
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/note="Differential display comparison of unt
dimethylfumarate treated U937 cells"
10 c 11 g 22 t
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/note="Differential display comparison of untreated and
dimethylfumarate treated U937 cells"
a 12 c 16 g 13 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                          /clone="COL03340"
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GI:12944647
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76.9%;
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76.9%;
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Pred. No. 9.6e+03;
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UUGCIM library Mus musculus genomic
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                                                                            GSS 16-FEB-2001
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cDNA clone
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Sakaki
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ACCESSION
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                                       KEYWORDS
                                                                                                               DEFINITION
                                                                                                                                                  AU106864/c
                                                                                                                                                                        RESULT 5
                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                       Matches
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Best Local
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 ORGANISM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                               12
                                                                                        AU106864 Sugano Homo sapiens MBLAN21NR1, mRNA sequence.
                                                                                                                                                                                                                                                            2 TCATCCTGGGTAAGAGTGGGACACCTGTG 30
                                                                                                                                                                                                                                                                                                       21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tel: 801 585 5606
Fax: 801 585 7177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Robert B. Weiss
University of Utah Genome Center
University of Utah
Rm. 308, Biomedical Polymers Res
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly
,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von Niederhausern,A.
and Wright,D.,Weiss,R.
                                                      AU106864
AU106864.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Class: plasmid ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Plate:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mouse whole genome scaffolding with paired end reads from 10kb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mammalia; Eutheria;
1 (bases 1 to 48)
Homo sapiens
                                         EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             High quality sequence stop: 48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Seq primer: CGTTGTAAAACGACGGCCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unpublished (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                plasmid inserts
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa;
                     numan
                                                                                                                                                                                                                                                                                                                       Similarity
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                                                                                                                                                                                                                                                                                                     Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWDA2 (gil4732114|gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and
                                                                                                                                                                                                                                                                                                                                                                                                                     purified. The sheared, adaptored mouse DNA was annealed to adaptored vector DNA, and transformed into chemically-competent E. coli XLIO-Gold (Stratagene) cells and selected for ammicillin resistance."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        musculus C57BL/6J (male) was obtained from the Jackson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (http://www.jax.org/resources/documents/dnares/).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Laboratory Mouse DNA Resource
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/note="Vector: PWD42nv; Purified genomic DNA from M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /sex="Male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /clone_lib="Mouse 10kb plasmid UUGC1M library"
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                                                        GI:13556385
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                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                               Score 16.2; DB 17;
Pred. No. 1.1e+04;
0; Mismatches 8;
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             Seq primer: -40UP from Gibco
High quality sequence stop: 1
Location/Qualifiers
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AI439612.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mRNA sequence
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                                                                    Insert Length:
                                                                                                                                                                                                                                                                                                                                        Tumor.
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Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Jap
Email: ysuzuki@ims.u-tokyo.ac.jp
Suzuki,y., Yoshitomo-Nakagawa,K., Maruyama,K., Su
Trace considered overall poor quality Insert Length: 1378 Std Error: 0.00
                                                                                                                                                                                                                                                               Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tc91b01.x1 NCI_CGAP_CLL1 Homo similar to gb:M35531 GALACTOS:
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Suzuki,Y., Taira,H., Ts
,H., Ota,T., Isogai,T.,
                                                                                           M.D., Louis M. Staudt, M.D., Ph.D. CDNA Library Preparation: M. Bento Soares, Ph.D. cDNA Library Arrayed by: Greg Lennon, Ph.D. DNA Sequencing by: Washington University Genome Clone distribution: NCI-GGAP clone distribution found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                          Tissue Procurement: Ash Alizadeh,
                                                                                                                                                                                                                                                                                                                    Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                  NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap National Cancer Institute, Cancer Genome Anat
                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact: Yutaka Suzuki
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                                                                    www-bio.llnl.gov/bbrp/image/image.html
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S. Construction and characterization of a full length-enriched and 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997). Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                              Gene Index
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/note="Differential display comparison of untreated and dimethylfumarate treated U937 cells"
a 14 c 15 g 11 t
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/db_xref="taxon:9606"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GALACTOSIDE 2-L-FUCOSYLTRANSFERASE (HUMAN);,
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Pred. No. 1.4e+04;
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IMAGE:2073481 3'
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information
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                                                                                                                                                                                                                                               Grever,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 50)
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EST.
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                                                                                                                                                                                                                                                                                                                                                            cDNA Library Preparation: M. Bento Soares, Ph.D. CDNA Library Arrayed by: Greg Lennon, Ph.D. DNA Sequencing by: Washington University Genome Sequencing Center Clone distribution: NCI-CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tumor Gene Index
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note="Vector: pT7T3D-Pac (Pharmacia) with a modified polylinker; 1st strand cDNA was prepared from pooled bulk breast tumor tissue, and was then primed with a Not I oligo(dT) primer. Double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of the modified pT7T3 vector. This library is the normalized version of
    NCI_CGAP_Brl.1.
                                                                                                                                                                   /clone_lib="NCI_CGAP_Br2"
/sex="female, pooled"
/tissue_type="breast"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/db_xref="taxon:9606"
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/tissue_type="B-cell, chronic lymphotic leukemia"
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                                                                                                                                                                                                                                                        /clone="IMAGE:1631407"
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76.0%;
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Pred. No. 2.3e+04;
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Homo sapiens cDNA clone IMAGE:16314
repetitive element;, mRNA sequence
Library was constructed by Bento Soares
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REFERENCE AUTHORS TITLE

VERSION KEYWORDS

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RESULT 7

JOURNAL COMMENT

FEATURES

Query Match Best Local Similarity Watches 18; Conserv

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Score 15; DB 14; Pred. No. 3.4e+04;

DB 14; Length 47;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                yf18e09.sl Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:127240 3' similar to gb|M87933|HUMAALU364 Human carcinoma cell-derived alu RNA transcript, (rRNA);, mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                High qality sequence starts: I High qality sequence stops: 1 Source: IMAGE Consortium, LLNL This clone is available royalty-free through LLNL: contact the IMAGE Consortium (info@image.llnl.gov) for further information. Trace considered overall poor quality
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Washington University School of Medicine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unpublished (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: est@watson.wustl.edu
Insert Size: 716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Contact: Wilson RK
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                                                (Pharmacia), digested with Pac I and cloned into the Pac I and Eco RI sites of the modified pT7T3 vector. Library went through one round of normalization. Library
                                                                                                      and M. Fatima Bonaldo.
                 constructed by Bento Soares and M.Fatima Bonaldo
                                                                                                                                                                                                                                                                             /db_xref="taxon:9606"
/clone="IMAGE:127240"
                                                                                                                                                                                                                                              /sex="male"
                                                                                                                                                                                                                                                                /clone_lib="Soares fetal liver spleen lNFLS'
                                                                                                                                                                                                                                                                                                                    /db_xref="GDB:479401"
                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
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Pred. No. 2.4e+04;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          High quality sequence stop: 1.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IMAGE Consortium (info@image.llnl.gov Trace considered overall poor quality
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Washington University School of Medicine 4444 Forest Park Parkway, Box 8501, St. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unpublished (1995)
Contact: Wilson RK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ,R., (Williamson,A., Wohldman The WashU-Merck EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ,M., Hultman,M., Kucaba,T., Le,M., Lennon,G., Marra,M., Parsons,J
Rifkin,L., Rohlfing,T., Soares,M., Tan,F., Trevaskis,E., Waterstor,R., Williamson,A., Wohldmann,P. and Wilson,R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This clone is available royalty-free through LLNL ; contact the IMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       High quality sequence starts: 1 High quality sequence stops: 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Email: est@watson.wustl.edu
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314 286 1810
                                           Conservative
                                                                                                                                          double-stranded cDNA was size selected, ligated to Eco RI adapters (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of a modified pT7T3 vector (Pharmacia). Library went through one round of normalization to a Cot = 5. Library constructed by Bento Soares and M.Fatima Bonaldo. RNA from 4 multiple sclerosis lesions from one patient was kindly provided by Dr. Kevin G. Becker (NINDS/NIH)."
                                                                                                                                                                                                                                                                                                                                                               /tissue_type="multiple sclerosis lesions"
/dev_stage="Age 46"
/lab_host="VH1OB (ampicillin resistant)"
/note="Vector: pT7T3D (Pharmacia) with a modified
polylinker V_TYPE: phagemid; Site_1: Not I; Site_2: E;
; 1st strand CDNA was primed with a Not I - oligo(dT)
primer [5'
                                                                                                                                                                                                                                                                                                                                       /db_xref="GDB:3898260"
/db_xref="taxon:9606"
/clone="IMAGE:279884"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /clone_lib="Soares_multiple_sclerosis_2NbHMSP"
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Pred. No. 3.6e
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Pools of cells were isolated from a GenomeScreen(TM) library. The
library of cells was generated by retroviral integration of a gene
tagging element consisting of: 1) A promoterless beta-lactamase;
proceeded by a splice acceptor as a reporter for gene expression;
2) A promoter driving neomycin resistance followed by a splice
donor to trap downstream exons. 3' RACE from neomycin gene was
performed using total RNA from isolated pools. Output was shotgun
cloned in pAmp-1 and used to transform DH5-alpha competent
bacteria. 5' ends of reported sequences were immediately preceded
                  Mus musculus
                                                                                                     AU258691\ 3'\mbox{-directed} mouse cDNA library Mus musculus BED0013497 3', mRNA sequence.
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, Durick,K. and Pollok,B.
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1 (bases 1 to 40)
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AST-T32B0048 Genetrap T47D Human sapiens genomic 5', DNA sequence.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
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Tel: 8584048436
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                                      house mouse.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
/db_xref="taxon:9606"
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73.1%;
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                                                                                                                                                                                                                                                                                                                   Score 14.8;
Pred. No. 3.
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Contact: Kikuya Kato
Contact: Kikuya Kato
Graduate School of Biological Sciences
Mara Institute of Science and Technology
Nara Institute of Science and Technology
8916-5 Takayama, Ikoma, Nara 630-0101, Japan
                                                                                                                                                                                                                  Email: ysuzuki@ims.u-tokyo.ac.jp
Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A..and Sugano
,S. Construction and characterization of a full length-enriched and
a s'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).
                                                                                                                                                                                                                                                                                         Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Jaj
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AU108052 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone COLE0015, mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Email: kkato@bs.aist-nara.ac.jp,
URL:http://love2.aist-nara.ac.jp/BED/index.html.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tel: 81-743-72-5581 Fax: 81-743-72-5589
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                                                                                                                                                                                                                                                                                                                                                                             EMBO Rep. 2 (5), 388-393
21270072
                                                                                                                                                                                                                                                                                                                                                                                                               mapping of mRNA start sites
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Suzuki,Y., Taira,H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kato, K.
                                                                                                                                                                                                                                                                                                                                                            Contact: Yutaka Suzuki
                                                                                                                                                                                                                                                                                                                                                                                                                              Diverse transcriptional initiation revealed by fine, large-scale
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Generation of expressed sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J., Ha
,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K., Sakaki
,Y., Nakamura,Y., Suyama,A. and Sugano,S.'
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                                                         /clone_lib="Sugano Homo sapiens cDNA library"
/note="Differential display comparison of unt
dimethylfumarate treated U937 cells"
a 11 c 17 g 14 t
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/clone="BED0013497"
/clone=1b="3'-directed mouse cDNA library"
/tissue_type="brain"
/note="Vector: pGEM-T-easy"
15 c 7 g 10 t 1 others
                                                                                                                                                          /organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                          /clone="COLE0015"
                                                                                                                                                                                                             Location/Qualifiers
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70.4%;
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              Score 14.8;
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Pred. No. 4.1e+04;
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              9;
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Best Local Similarity
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Possible reversed clone: similarity on wrong strand This clone is
Possible reversed clone: northrogen Corp. 2130 South Memorial
1, 200
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         soybean.
Glycine max
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     available through: ResGen, Invitrogen Corp. 2130 South Parkway Huntsville, AL 35801 For further information
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Washington University School of Medicine
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, A., Bolla, B., Marra, M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota: Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosidae; eurosids I; Fabales; Fabaceae; Papilionoideae; Phaseoleae
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: est@watson.wustl.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fax: 314 286 1810
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    10
Erpelding.
                                                                                                                                                                                                  /note="Vector: pBluescript II XR; Site_1: EcoRI; Site_2: XhoI; This cDNA library was constructed from mRNA isolated from whole seedlings of 2-3 week old greenhouse grown plants. The cDNA library was prepared using the Stratagene pBluescript II XR cDNA library construction kit. Complementary DNA was synthesized from mRNA using a primer consisting of a poly (dT) sequence with a XhoI restriction site. EcoRI adapters were ligated to the blunt-ended cDNA fragments followed by XhoI digestion. The CDNA fragments were directionally cloned into the EcoRI-XhoI restriction was the control of the
                                                                      were transformed into XL10-Gold host cells. was constructed by Dr. Randy Shoemaker and i
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/db_xref="taxon:3847"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              greenhouse grown"
/lab_host="XL10-Gold"
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/clone_lib="Gm-c1013"
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                                                                                                                           The ligated cDNA fragments host cells. This library
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Score 14.6;

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Length 40;

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                                                                                                             Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 69.0 Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Trace considered overall poor quality
Possible reversed clone: similarity on wrong strand
Seq primer: -28ml3 rev2 ET from Amersham
High quality sequence stop: 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
TMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Washington University School of MedicineP
4444 Forest Park Parkway, Box 8501, St. Ld
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubu
Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M.,
Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B.,
Theising,B., Wylle,T., Lennon,G., Soares,B., Wilson,R. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AA871520

46 bp mRNA linear EST 16-N vq36e07.rl Barstead bowel MPLRB9 Mus musculus cDNA clone IMAGE:1096356 5' similar to SW:GPR2_HUMAN P46092 PROBABLE GPROTEIN-COUPLED RECEPTOR GPR2. ;, mRNA sequence.
                                                                         20; |Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MGI:602588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unpublished (1996)
Contact: Marra M/Mouse EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Waterston,R.
The WashU-HHMI Mouse EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AA871520.1 GI:2966965
                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        house mouse
TTTACTCCGGGTACGAGGGGGGGGGGCCTAT 31
                                   TTCATCCTGGGTAAGAGTGGGACACCTGT 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTCGTCCCCGTTCAGATCGGAACAGCTGT 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTCATCCTGGGTAAGAGTGGGACACCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (bases 1 to 46)
                                                                                                                                                                     σ
                                                                                                                                                                                                                                                                                  [AATTCGGATCCTTG], digested with Not I and cloned into the Not I and Eco RI sites of the modified pT7T3 vector. Source irradiated bowel harvested 72 hours after
                                                                                                                                                                                          irradiation (1400 Gys).
Barstead. "
                                                                                                                                                                                                                                                                                                                                                                        /tissue_type="bowel"
/dev_stage="8 weeks"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                    /db_xref="taxon:10090"
/clone="IMAGE:1096356"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                /clone_lib="Barstead bowel MPLRB9"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /strain="FVB/N"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Mus musculus
                                                                                           48.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            69.0%;
                                                                                                                                                                                                                                                                            double-stranded cDNA was ligated to Eco RI adaptors
                                                                                                                                                                     O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chordata; Craniata; Vertebrata; Euteleostomi; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                       Score 14.6; DB 9;
Pred. No. 4.9e+04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No. 4.6e+04; 0; Mismatches 9;
                                                                                                                                                                   18
                                                                         Mismatches
                                                                                                                                                                 ω
                                                                                                                                                                   11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bowles, M., Dietrich, N., Dubuque, T.
                                                                                                                                                                                                      Library constructed by
                                                                                                                                                                   rt
                                                                                                             9
                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Louis, MO
                                                                                                         Length 46;
                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      63108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EST 16-MAR-1998
                                                                        0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0,
                                                                      Gaps
                                                                                                                                                                                                      Bob
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mus
                                                                        0,
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REFERENCE
AUTHORS
  В
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VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT
H99413
                                                                                                                                                               ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
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                                                                                                                                                                               BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COCUS
                                                                                                Query Match
Best Local
                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                               18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Source: IMAGE Consortium, LLNL;
This clone is available royally-free through LLNL;
IMAGE Consortium (info@image.llnl.gov) for further i
Trace considered overall poor quality
Insert Length: 679 Std Error: 0.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               40 bp mRNA linear EST 15-DEC-1995 yx24f02.sl Soares melanocyte 2NbHM Homo sapiens cDNA clone IMAGE:262683 3' similar to gb:J02931 TISSUE FACTOR PRECURSOR (HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             High quality sequence starts:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Contact: Wilson RK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ,M., Hultman,M., Kucaba,T., Le,M., Lennon,G., Rifkin,L., Rohlfing,T., Soares,M., Tan,F., Tre,R., Williamson,A., Wohldmann,P. and Wilson,R. The WashU-Merck EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hillier,L., Clark,N., Dubuque,T., Elliston,K., Hawkins,M., Holma,M., Hultman,M., Kucaba,T., Le,M., Lennon,G., Marra,M., Parsons, Rifkln,L., Rohlfing,T., Soares,M., Tan,F., Trevaskis,E., Waters!
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Insert Length: 679 Std Ers
Seq primer: ml3 -40 forward
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Email: est@watson.wustl.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4444 Forest Park Parkway, Box 8501, St. Louis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Washington University School of Medicine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unpublished (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                н99413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           H99413.1 GI:1124081
                                                                                                  Similarity
                                       TTCATCCTGGGTAAGAGTGGGACAC
TCCAGCCTGGGNAAGAGAGCAAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (bases 1 to 40)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    quality sequence stop: 1.
Location/Qualifiers
                                                                                                                                                                                 16
                                                                               Conservative
                                                                                                                                                                                                                 double-stranded cDNA was size selected, ligated to Eco RI adapters (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of a modified pT7T3 vector (Pharmacia). Library constructed by Bento Soares and M.Fatima Bonaldo. RNA from normal foreskin melanocytes
                                                                                                                                                                                                                                                                                                                 (FS374) was kindly provided by Dr. Anthony P. Albino. 11 c 8 \ g \ 4 \ t \ 1 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/db_xref="GDB:3872325"
                                                                                                                                                                                                                                                                                                                                                                                                                                               /sex="Male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                             /clone_lib="Soares melanocyte 2NbHM"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /clone="IMAGE:262683"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /db_xref="taxon:9606"
                                                                                              48.0%;
72.0%;
                                                                           0;
                                                                                              Score
Pred.
                                                                               Mismatches
                                                                                         No.
                                                                                                  14.4;
No. 5
26
                                                                         5.5e+04;
7;
                                                                                                                       DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hominidae;
                                                                                                                Length
                                                                             Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hawkins, M., Holman
                                                                                                                   40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          contact the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Euteleostomi;
                                                                           0;
                                                                           Gaps
                                                                           0
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Job time : 1302.03 secs

Search completed: June 21,